

September 2014

MISSISSIPPI

Project Status



US Army Corps
of Engineers®
Vicksburg District



Value to the Nation

Mississippi Project Status Book

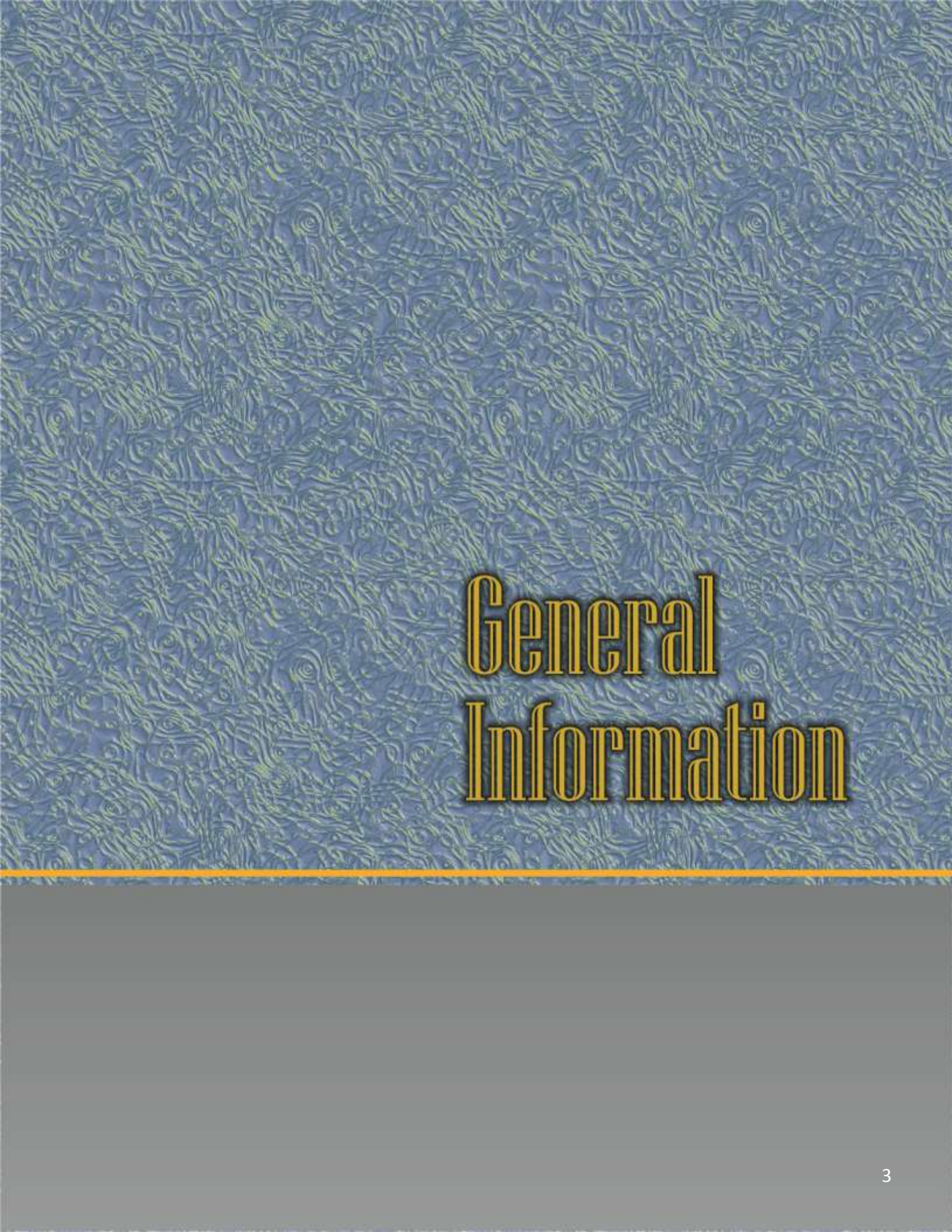
for September 2014

This Project Status Book contains information on the latest progress of the Vicksburg District's projects in the State of Mississippi. You will find project maps with corresponding fact sheets for each project. Fact sheets cite authorization for the project and provide locations and project description information. Also provided are activities for the fiscal year 2014. District capabilities are included for additional funds that may become available. Additionally, important issues or impacts are supplied for a more detailed perspective of the project. The Vicksburg District publishes this book to provide valuable status information for ongoing projects. For your added convenience, a copy of this book in PDF format is provided on the disk attached below. However, if you should find you still have questions or need additional information about projects contained in this book, please contact:

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General Information

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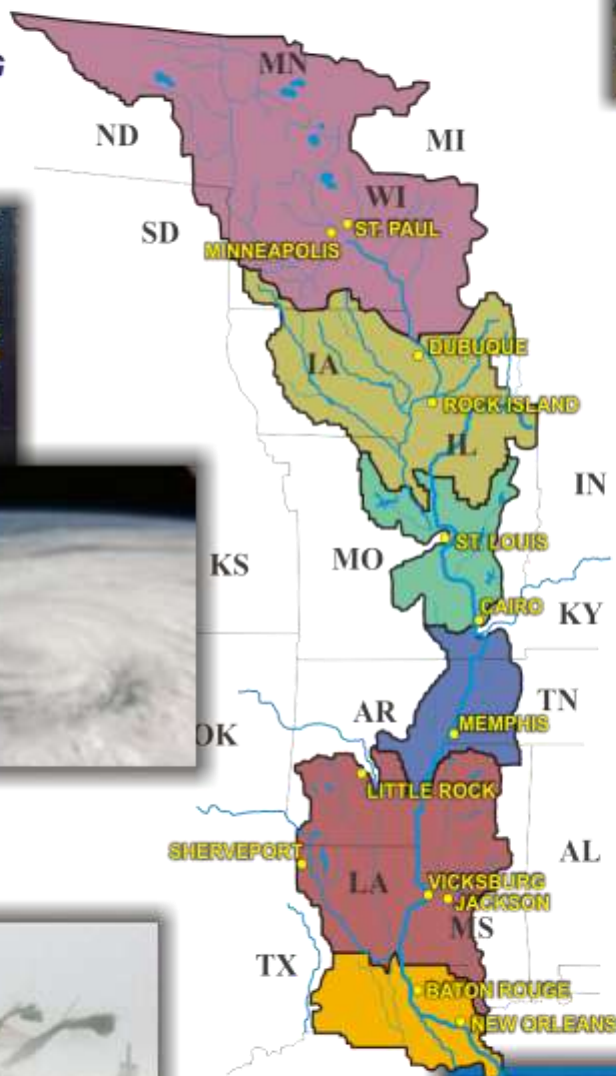
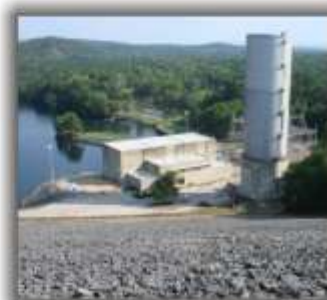
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The Mississippi Valley Division

- We are 6 Interdependent Districts
- We have regional technical experts that bring expertise from the entire valley to work any water resource engineering challenge
- It is our pleasure to serve and provide the Nation's water resource engineering solutions
- We are...***BUILDING STRONG***





US Army Corps
of Engineers®
Vicksburg District

BIOGRAPHY



Colonel John W. Cross

Colonel John W. Cross is a native of Laurel, Mississippi and earned his Bachelor of Science Degree in geology in 1987 from the University of Southern Mississippi. He received a Masters of Business Administration in 1998 from the University of Central Texas and a Masters of Strategic Studies in 2010 from the US Army War College. His military education includes the Engineer Officer Basic and Advanced Courses, the Command and General Staff College at Fort Leavenworth, Kansas, and the US Army War College at Carlisle Barracks, Pennsylvania.

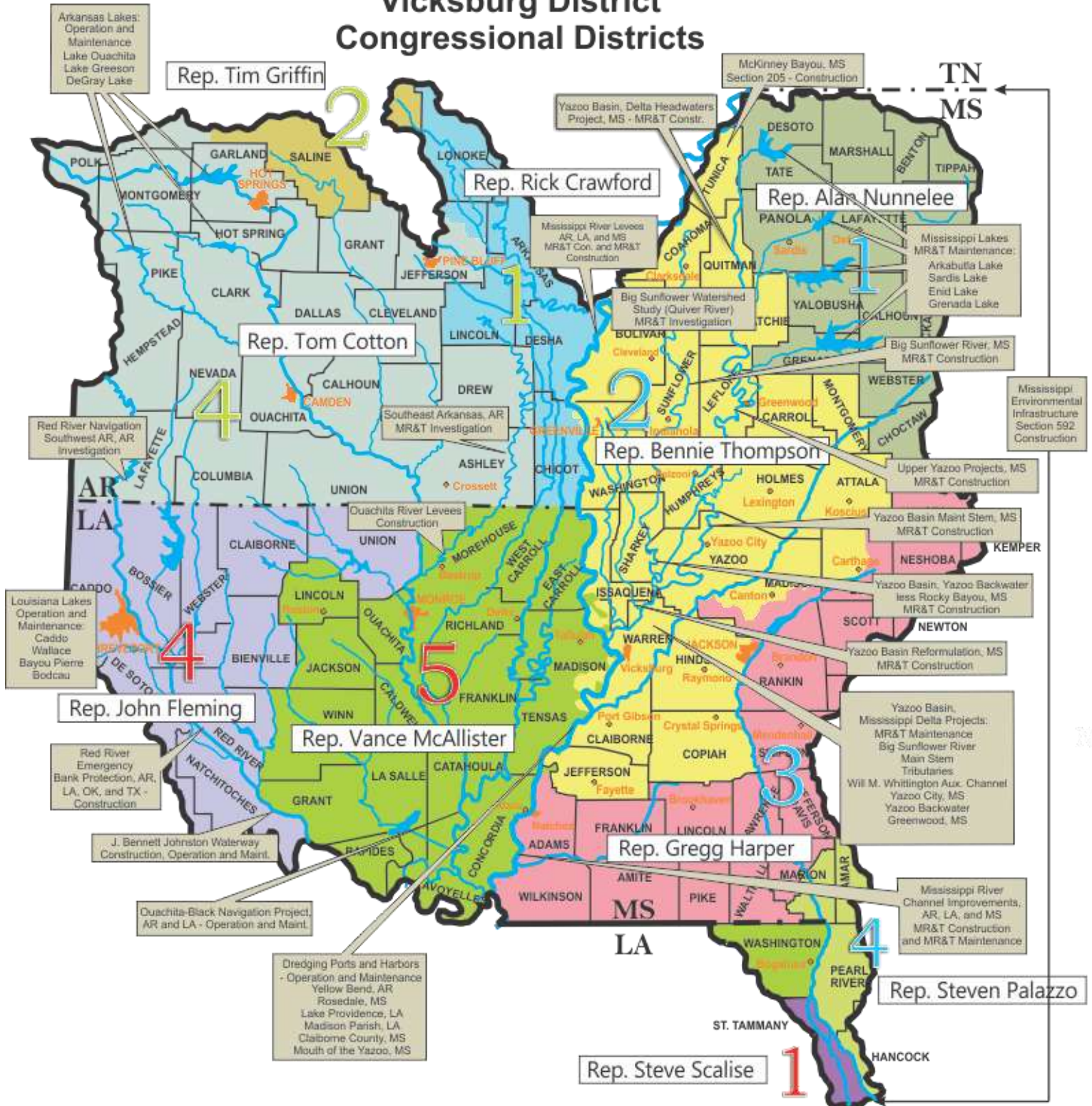
Colonel Cross began his career as an engineer platoon leader in Germany and later served as a company executive officer. After attending the Engineer Captain's Advanced Course, he moved to Fort Polk, Louisiana and deployed to Desert Storm serving as an assistant battalion operations officer. Following the war, he commanded an engineer company at Fort Polk, Louisiana and Fort Hood, Texas. He was selected for the Army's Training with Industry Program where he worked for the Environmental Protection Agency (EPA) in Denver, Colorado. His focus during this time included compliance with State and Federal regulations and environmental restoration at Superfund sites and Formerly Used Defense Sites (FUDS) in an eight state area. After working with the EPA in Denver, Colonel Cross was assigned to the Corps of Engineers Fort Worth District with duty at Fort Hood, Texas. At Fort Hood, he worked on various environmental contracts as well as military construction and FUD remediation in central Texas. As part of his tour with the District, he served as a project officer at Brooks Air Force Base in San Antonio, Texas supervising Military Construction for the Air Force.

He attended the Army's Command and General Staff College and served again at Fort Hood as a battalion operations officer and executive officer. After a tour in Stuttgart, Germany, he was selected for command of the Brigade Special Troops Battalion in 1st Brigade, 4th Infantry Division at Fort Hood. He deployed the battalion to Iraq in 2006 and operated north of Baghdad. After command, he was selected to lead the engineer training team at the Army's National Training Center at Fort Irwin, California where he trained battalions before they deployed to combat in Iraq and Afghanistan.

After graduating from the War College in 2010, he was assigned to Fort Bragg, North Carolina where he served as the XVIII Airborne Corps Engineer and deployed with the Corps to Iraq. In Iraq, he served as the Deputy Engineer to United States Forces Iraq and was responsible for the final disposition of over 80 bases and attendant infrastructure housing 50 thousand soldiers as well as the construction of facilities for the Department of State.

Colonel Cross is married and they have two sons.

Vicksburg District Congressional Districts



Governors and U.S. Senators

ARKANSAS
 Governor Mike Beebe
 Senator Mark Pryor
 Senator John Boozman

LOUISIANA
 Governor Bobby Jindal
 Senator David Vitter
 Senator Mary Landrieu

MISSISSIPPI
 Governor Phil Bryant
 Senator Thad Cochran
 Senator Roger Wicker



**US Army Corps
of Engineers®**
Vicksburg District

Vicksburg District Assets



- 9** Watersheds in Arkansas, Louisiana, and Mississippi
- 7** Mississippi River Ports handling over 8.5 million tons of cargo
- 5** Red River Ports handling over 1 million tons of cargo
- 12** Locks and **9** dams on the Pearl, Red and Ouachita Rivers
- 3** Hydropower plants capable of generating 168,500 kilowatts of electricity
- 10** Lakes with 1,673 miles of shoreline
- 21** Pumping plants
- 478** Flood control structures
- 1,252** Miles of navigable channel
- 1,910** Miles of levees
- 460** Miles of Mississippi River Levees
- 450,603** Acres of project and mitigation lands are managed for forestry and wildlife enhancement
- 146** Recreation areas
- 2,772** Campsites
- 1,529** Picnic sites



Economic Benefits

From a program of \$150M, the Vicksburg District returns these economic benefits!

Annual Direct Economic Contributions

Fees Collected	\$ 1,992,000
Agricultural	\$ 576,000
General Leases and Concessions	\$ 413,000
Water Supply Payments	\$ 1,092,000
Hydropower	\$ 12,000,000
Total Direct Contributions	\$ 16,073,000

Indirect Economic Contributions

Flood Damages Prevented	\$ 654,988,000
Recreation	\$ 49,763,000
Water Supply Benefits	\$ 115,792,000
Navigation Savings	\$ 125,020,000
Total Indirect Contributions	\$ 945,563,000

Value to the Nation

Mississippi River

Benefits

Project	Average Annual Costs	Average Annual Benefits
Mississippi River and Tributaries	\$210 Million	\$1.46 Billion

Benefit-to-Cost Ratios

The current remaining (FY13) benefit-to-cost ratio for the MR&T system is 45.3 to 1 and likewise the total benefit-to-cost ratio for the system is 3.3 to 1 at the 7% interest rate. The benefit-to-cost ratios are based on annualizing the remaining and total benefits associated with the completed project and dividing them by the respective annualized cost to achieve these benefits. All project benefits and cost are annualized at the 7% interest rate over the economic life of the project. For the MR&T the economic life is 100 years.

Levees

Consists of raising, strengthening and extending levees to provide protection against flooding.



Did you know?

The Mississippi River from its confluence with the Ohio River to Baton Rouge, LA supports the transport of over 176 million tons of cargo annually!

Channel Improvement



Consists of stabilizing riverbanks in desirable alignment and obtaining the most efficient flow characteristics for flood control and navigation by revetments, dikes, foreshore protection and improvements. This improves navigation conditions, stabilizes bends, and reduces maintenance dredging requirements.



Flood Risk Management

Flood risk management along the Mississippi River is provided through a coordinated system-wide water management program utilizing:

- Water storage reservoirs
- Levees
- Drainage Structures
- Channel Improvements
- Pumping Plants
- Weirs
- Sediment Reduction and Erosion Reduction Measures



Environmental Stewardship

The Corps has developed an environmentally sustainable project with the philosophy to avoid and minimize adverse environmental impacts. When impacts are unavoidable, compensation is made for the loss.

- The Corps has created over 6,700 acres of aquatic habitat from borrow areas
- The Corps has reforested at least 3,000 acres of borrow areas
- The Corps has reforested over 25,000 acres of mitigation lands

Navigation

The Vicksburg District uses numerous tools to increase the safety and dependability of navigation on the Mississippi River.

- Dikes, revetments, and dredging are used to stabilize the navigation channel
- Channel Stabilization improves flow and reduces erosion
- The Vicksburg District supports two MR&T ports and five O&M ports

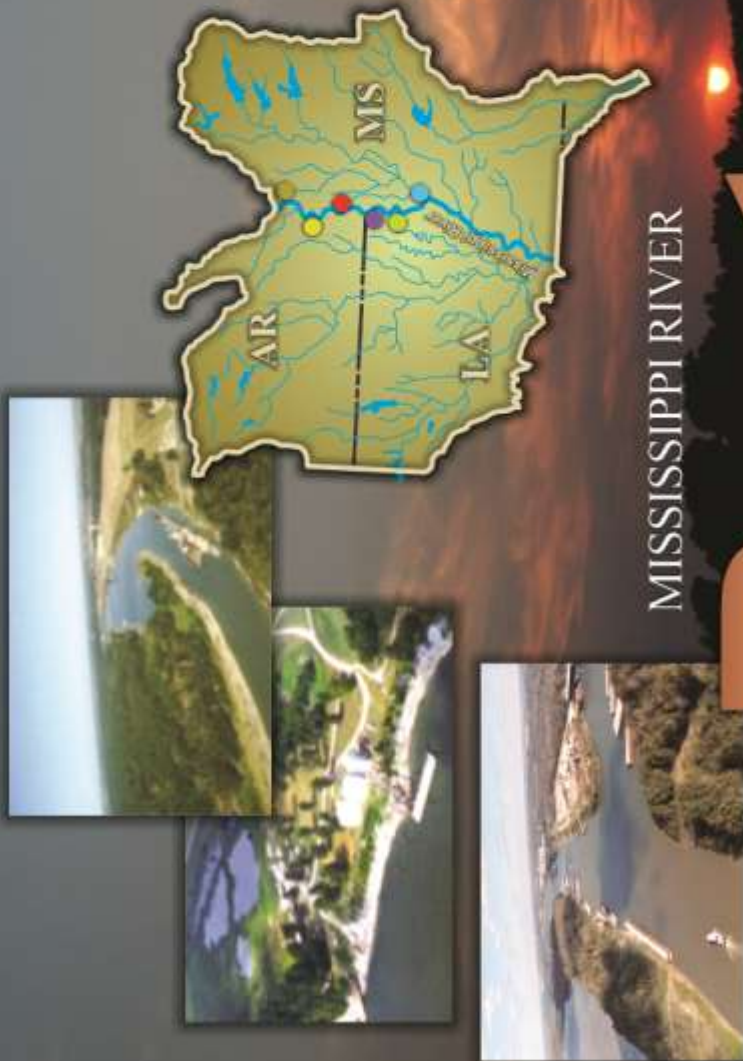
MR&T Ports

MR&T Port	2012 Commercial Tonnage	Jobs Sustained	Annual Payroll
Greenville, MS	3,071,177	540	\$12,600,000
Vicksburg, MS	2,601,580	4,000	\$80,000,000

O&M Ports

O&M Port	2012 Commercial Tonnage	Jobs Sustained
Rosedale, MS	1,184,310	325
Yellow Bend, AR	402,482	N/A
Lake Providence, LA	732,807	291
Madison Parish, LA	433,258	300
Claiborne Co., MS	N/A	N/A

Value to the Nation



MISSISSIPPI RIVER

Ports

Port of Rosedale (RM 585)

2012 commercial tons - 1,184,310
3-year average tonnage - 1,234,282
Industries: esco Resource, Cives Steel, Jimmy Sanders Agricultural, Jantran Towing, APAC

32 RM

Yellow Bend Port (RM 554)

2012 commercial tons - 402,482
3-year average tonnage - 618,000
Industry: Bruce Oakley, Ark City Tank Storage, T.L. James, Producers Rice Mill

17 RM

Port of Greenville (RM 537)

2012 commercial tons - 3,071,177
3-year average tonnage - 2,452,950
Jobs sustained - 540
Major Industries: Entergy, ConAgra Fertilizer, APAC, Bunge, US Gypsum, Greenville Gravel, Scott Fertilizer, Superior Boat Works, Farmer Grain Terminal, Ergon, Greenville Shipbuilders, USCG - Patoka

53 RM

Lake Providence Port (RM 484)

2012 commercial tons - 732,807
3-year average tonnage - 959,751
Jobs Sustained - 291
Industries: Terral River Service, Bunge

26.8 RM

Madison Parish Port (RM 457.2)

2012 commercial tons - 433,258
3-year average tonnage - 540,909
Jobs Sustained - 300-400

20.2 RM

Port of Vicksburg (RM 437)

2012 commercial tons - 2,601,580
3-year average tonnage - 3,105,163
Jobs sustained - 4,000

Designated Foreign Trade Zone, Port of Entry - maintains a U.S. Customs Service

Major Industries: Anderson-Tully Lumber, Big River Shipbuilders, Bunge-Ergon, Citgo, ConAgra Fertilizer, Petroleum, DTE Petcoke, Ergon Marine & Industrial Supply, Ergon Refining, Falco Lime, Falco Chemical, Gavilon Fertilizer, Graham Packaging, Kinder Morgan Bulk Terminals, Magnolia Marine Transport, Neill Gas, Shell Oil, Quaker State, Polyvulc USA, Power Transport Service, Smith Towing A, Specialty Process Fabricator, US Coast Guard, Vicksmetal Armco, Waring Oil



Value to the Nation

Red River Watershed J. Bennett Johnston Waterway



Cargo	
Port	Types of Cargo
Caddo-Bossier	Aggregate, Coal, Steel, Fertilizer, Petrochemicals, Project Lifts
Red River Parish	Aggregate, Coal, Steel, Fertilizer, Petrochemicals, Project Lifts
Natchitoches	Aggregate, Forest Products, Asphalt
Alexandria Regional	Fertilizer, Military Cargo, Clinic Acid, Aggregate, Petrochemicals
Avoyelles Parish	N/A-Emerging Port

Commodity Movements		
Commodity	CY 2010 Short Tons	CY 2011 Short Tons
Crude Petroleum	264,710	192,993
Gasoline	334,057	310,950
Distillate Fuel Oil	397,498	590,641
Residual Fuel Oil	266,798	412,439
Nitrogenous Fertilizer	132,277	110,911
Alcohols	226,917	205,911
Ammonia	85,935	84,642
Sodium Hydroxide	135,114	143,717
Limestone	1,698,290	1,455,483
Sand & Gravel	726,062	900,903
Waterway Materials	1,466,628	1,023,803
Lime	11,251	39,936
Grains	217,884	384,924
Oilseeds	185,710	185,710



Project Benefits

Benefits	Basic Project	With Gaming
Total Injection (spending)	\$ 4,629,600,000	\$ 16,410,800,000
Total Sales	8,471,300,000	25,804,700,000
Total Earnings	2,770,200,000	8,110,000,000
Total Taxes	58,200,000	170,300,000
Total Jobs (average)	2,107	6,862

Did you know?

- The \$1.9 billion Red River Waterway Project was completed in 1994
- Five lock and dam complexes provide a total lift of 140 feet the equivalent of a 14-story building
- The navigation channel has a minimum depth of 9 feet and a minimum width of 200 feet
- The U.S. Army Corps of Engineers operates and maintains the locks and dams and supervises bank stabilization and other enhancements
- Over 1.7 million visitors annually take advantage of the facilities offered by 22 recreation areas in 8 parishes along the waterway
- Over 8,400 acres of mitigation lands have been purchased to offset losses caused by project construction

Ports

Port	2010 Commercial Tonnage	Jobs Sustained
Caddo-Bossier	1,700,000	7,550
Red River Parish	959,366	N/A
Natchitoches	195,113	291
Alexandria Regional	1,500,000	300
Avoyelles Parish	N/A	N/A



Volunteer Partners		
Organization	Service Provided	
City of Shreveport	Operation and Maintenance of the Shreveport Regional Visitor Center	
Red River Parish Police Jury	Mow and clean areas of Lock 4 East and West Recreation Areas	
City of Natchitoches	Operation and Maintenance of the Grand Ecovir Visitor Center	



Value to the Nation

Ouachita-Black Watershed



Commodity Movements

Commodity	CY 2010	CY 2011
Crude Petroleum	254,085	102,323
Gasoline	201,497	174,459
Distillate Fuel Oil	101,113	163,687
Nitrogenous Fertilizer	30,341	4,416
Ammonia	65,935	84,642
Sodium Hydroxide	106,250	82,146
Metallic Salts	36,997	11,390
Limestone	181,768	134,664
Grains	59,612	82,207
Oilseeds	78,161	95,521

Ouachita - Black Benefits

Benefit	Value
Transportation Savings	\$1,100,000,000
Jobs Sustained	28,000
Annual Payroll	\$325,000,000
Impact on Economy	\$3,900,000,000
Taxes Paid	\$180,000,000

H. K. Thatcher L&D
River Mile 281.9

Felsenthal L&D
River Mile 226.9

Upper Ouachita NWR

Bayou D'Arbonne NWR

Columbia L&D
River Mile 117.0

Jonesville L&D
River Mile 25.0

Ports

Ports	Typical Cargo
Greater Ouachita	Aggregates, oil, fuel, fabricated steel
Columbia	Cotton seed and grain



Value to the Nation

Recreation

18 Corps recreational areas along the 4 pools of the Ouachita-Black Navigation Project with 700,000 visitors annually - facilities include:

- 18 boat ramps with 48 lanes
- 16 day-use areas
- 1 swimming beach
- Two Class A campgrounds outgranted to local governments

Environmental Stewardship

- Originally part of the project, the **65,000 acre** Felsenthal National Wildlife Refuge lies adjacent to the Ouachita River in Arkansas
- The **15,500 acre** D'Arbonne National Wildlife Refuge is located on Bayou D'Arbonne in Louisiana

Flood Risk Management

Watershed management is provided through a coordinated system-wide water management program utilizing:

- Water storage reservoirs with over 3.5 million acre-feet of capacity
- Over **370 miles** of levees along the Ouachita River, and in the Tensas-Cocodrie, Larto Lake to Jonesville, Sicily Island and Below Red River areas
- **120 miles** of channel and tributary improvements along the Tensas River
- **5 pumping plants** of 300 cfs, 500 cfs, 750 cfs, 4,000 cfs, and 6,500 cfs

Navigation

- **337-mile Ouachita-Black Navigation Project** provides for a 9-foot by 100-foot navigation channel from the mouth of the Black River to Camden, AR
- **4 Locks and Dams** to regulate pool height and pass navigation
- Project supports approximately **28,000 private sector jobs** with an annual **payroll of \$325,000,000**

Water Supply

- Provides water supply for cities of Hot Springs, Malvern, Arkadelphia and Camden in Arkansas as well as Monroe, Louisiana
- Supplies water to nine major industries
- Provides water supply for crop irrigation

Arkansas Lakes



Hydropower

Project	Generating Capacity
Blakely Mountain Dam - Lake Ouachita	75,000 megawatts
DeGray Lake	68,000 megawatts
Narrow Dam - Lake Greason	25,500 megawatts

Economic Impacts

Project	Economic Impact
Lake Ouachita	\$18,000,000
DeGray Lake	\$14,000,000
Lake Greason	\$6,000,000



A Corps First!

DeGray Lake holds the distinction as the first "pump back capable" impoundment in the history of the Corps of Engineers. A re-regulation dam forms a 400-acre impoundment directly below the main lake that serves as a storage basin for pump back capable features. During designated times, i.e. drought, the 28,000 KW generator can be reversed pulling water out of the Lower Lake into the main lake to be utilized again for hydropower generation. The 400-acre Lower Lake also serves as an ideal waterfowl refuge.

Did you know?

- Narrows Dam is the only "all concrete" dam in the Vicksburg District
- The 3 Arkansas Lakes support over 700 jobs and provide over \$38,000,000 in economic benefits to local economies

Blakely Mountain Dam - Lake Ouachita 1956



1,127,000 visits in 2012!

Located along the Ouachita River in central Arkansas and surrounded by the Ouachita National Forest, the dam is 1100 feet wide and 205 feet tall creating a lake 205 feet deep at its deepest level. The project includes 690 miles of shoreline, 40,000 acres of water and 20,000 acres of public land. Facilities include 18 recreation areas with 18 campgrounds, 7 day-use areas, 19 boat ramps and 10 swimming beaches.

DeGray Lake 1972



954,000 visits in 2012!

Located along the Caddo River in south central Arkansas, the multi-purpose project includes 32,400 acres. DeGray Dam has a crest 3,400 feet wide and rises 243 feet above the river bed. The dam creates a lake 200 feet deep at its deepest level with 207 miles of shoreline. Facilities include 15 recreation areas with 8 campgrounds, 7 day use areas, 11 boat ramps and 8 swimming beaches.

Narrows Dam Lake Greason 1950



366,000 visits in 2012!

Located along the Little Missouri River in southwest Arkansas, Narrows Dam is 941 feet wide and rises to a height of the mean valley. The lake created by the dam, Lake Greason, stretches 2 miles in length and is 150 deep at its deepest level and has 134 miles of shoreline. The project contains over 16,000 acres with over 15,000 acres forested. Facilities include 17 recreation areas with 12 campgrounds, 7 day-use areas, 9 boat ramps and 6 swimming beaches.



Value to the Nation

Yazoo River Watershed

Benefits

Project	Average Annual Costs	Average Annual Benefits
Upper Yazoo Projects	\$17,373,000	\$52,816,000
Delta Headwaters Project	\$24,917,000	\$24,917,000

Main Stem

Consists of new and enlarged levee improvements along the Yazoo, Tallahatchie, and Coldwater Rivers from Yazoo City to Pritchard, MS, and channel clearing, cutoffs, and channel enlargement along the Yazoo, Tallahatchie and Coldwater Rivers.



Upper Yazoo Projects

Includes channel and levee features along the main channel of the Yazoo, Tallahatchie, and Coldwater Rivers from the vicinity of Yazoo City, MS to the confluence of the Arkabutla Creek with the Coldwater River. Stabilization, and sediment / erosion control.



Delta Headwaters Project

Consists of 16 watersheds, ranging from 1 to 600 square miles, with features including bank stabilization, grade control structures, floodwater-retarding structures and channel modifications for flood risk management; bank stabilization, and sediment/erosion control.



Yazoo River Watershed

encompasses the delta area extending north from Vicksburg, MS to north of Clarksdale, MS and east from the Mississippi River to the hills east of Greenwood, MS. It consists of roughly 8,900 square miles including all or parts of 12 Mississippi counties. The watershed has an approximate length of 175 miles and an approximate width of 40 miles.

Flood Risk Management

Flood risk management in the Yazoo River Basin is provided through a coordinated system-wide water management program utilizing:

- 4 water storage reservoirs
- 202 miles of levees
- 103 drainage structures
- 583 miles of channel
- 1 Pumping plant
- 8 Weirs
- Sediment reduction projects
- Erosion reduction measures

Flood Damages Prevented

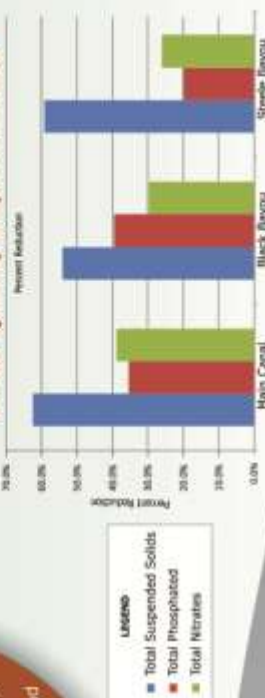
Area	FY 13 Flood Damage Prevented	Cumulative Flood Damage Prevented
Yazoo Backwater	\$ 1,217,000	\$ 99,311,000
Yazoo Headwaters	\$13,093,000	\$1,902,369,000
Mississippi Lakes	\$ 9,034,000	\$1,320,725,000
Big Sunflower River	\$ 4,152,000	\$ 417,369,000
Total Yazoo Basin	\$27,496,000	\$3,739,774,000

Environmental Stewardship

Since the early 1990s, the Vicksburg District has been involved with a flood control/sediment reduction project in the watershed which has dramatically improved water quality. Projects have included:

- Installation of low head weirs to maintain minimum water depths in channels
- Installation of 67 sediment control structures to prevent sediment from filling channels
- Water quality monitoring
- Large post-project reduction of in-stream suspended solids (TSS)

Water Quality Improvements



Value to the Nation





Mississippi Lakes



Benefits

Project	Average Annual Costs	Average Annual Benefits
Arkabutla Lake	\$5,000,000	\$33,000,000
Sardis Lake	\$5,000,000	\$34,000,000
Enid Lake	\$5,000,000	\$22,000,000
Grenada Lake	\$5,000,000	\$39,000,000

Economic Impacts

Project	Economic Impact	Jobs Supported
Arkabutla Lake	\$14,400,000	224
Sardis Lake	\$26,200,000	427
Enid Lake	\$10,500,000	161
Grenada Lake	\$49,930,000	742

Visitation

Project	2012 Visits
Arkabutla Lake	854,371
Sardis Lake	1,300,000
Enid Lake	569,395
Grenada Lake	1,821,815

Did you know?

- Over 4.5 million visits are made to the lakes' facilities each year.
- Visitor spending at the North Mississippi Lakes represents a sizable component of the economies of local communities surrounding the lakes.
- Visitors spend over \$101 million annually with 52% being captured by local economies.
- Visitor spending supports the addition of over 1,500 jobs.

Arkabutla Lake - 1943



Located just 30 minutes from Memphis, TN and Tunica, MS, in Tate and DeSoto counties in north Mississippi, Arkabutla Lake covers over 11,000 acres and provides a variety of opportunities for all outdoor enthusiasts to enjoy. Facilities include picnic areas, campgrounds, biking, hiking and walking trails, boat trails, equestrian trails ADA fishing pier and playgrounds.

Sardis Lake - 1940



Sardis Lake stretches over 98,000 acres thru Panola, Lafayette and Marshall Counties in northwest Mississippi. Located approximately 1 hour from Memphis, TN and 30 minutes from the University of Mississippi, the lake is a popular destination for water-related recreation. Facilities include nine campgrounds, boat ramps, cabins, playgrounds and swimming beaches.

Enid Lake - 1952



Located approximately 1 mile off Interstate 55, 72 miles south of Memphis, TN, Enid Lake encompasses over 44,000 acres and is visited each year by more than 1.5 million visitors. Enid has been recognized as one of America's Top 10 Fishing Spots. Facilities include campgrounds, hiking trails, off-road vehicle trail, playgrounds, boat ramps and swimming beaches.

Grenada Lake - 1954



Located in the gently rolling hills of pine and hardwood at the entrance to the Mississippi Delta, The lake covers 38,000 acres and offers some of the best fishing opportunities in the southeastern United States, and most any kind of water activity imaginable. Facilities include campgrounds, boat ramps, fishing areas, shelters, playgrounds and swimming beaches.



Value to the Nation

Pearl River Watershed



Carthage

JACKSON

PEARL RIVER

Monticello

Columbia

Bogalusa

Picayune



Levee Plan

Consists of raising, strengthening and extending levees to provide protection against flooding.



Value to the Nation

The Pearl River originates in Neshoba County, MS and meanders approximately 444 miles to empty into Lake Borgne. The Pearl River Watershed covers some 8,760 square miles and includes all or parts of 23 Mississippi Counties parts of 3 Louisiana Parishes.

Flood Risk Management

The Jackson (Fairgrounds) and East Jackson levees were completed in 1968 by the Corps. These protective works consist of two earthen levees, four gated outlets, and two pumping stations. Some 5.34 miles of river channel work was involved in constructing the plan. The Fairgrounds levee protects 420 acres in the fairgrounds area of Jackson on the west side of the river. The longer East Jackson levee protects 5,870 acres, including the town of Pearl and portions of Flowood and Richland. This project was sponsored by the Rankin-Hinds Pearl River Flood and Drainage Control District, which presently operates and maintains the levees. In 1984, an extension on the north end of the Fairgrounds levee was constructed to eliminate flanking of the levee.

Clearing of the floodway below the levee in Jackson was identified as an early action item to reduce Jackson flooding following the 1979 flood. The clearing plan, which was completed in 1984, extended from about 0.5 mile below the old Jackson sanitary landfill to Woodrow Wilson Bridge, a total of 3.3 river miles. The plan consisted of 237 acres of complete clearing, 20 acres of selective clearing, and 89 acres of partial clearing. To offset unavoidable impacts to fish and wildlife associated with the clearing plan, approximately 320 acres of bottomland hardwood were acquired as mitigation. The Pearl River Basin Development District is the local sponsor. In 2012, the Rankin-Hinds Pearl River Flood and Drainage Control District initiated a Section 211 Flood Risk Management Study to evaluate additional flood risk management alternatives for the Jackson, MS area. The study is funded 100 percent with non-Federal funds.

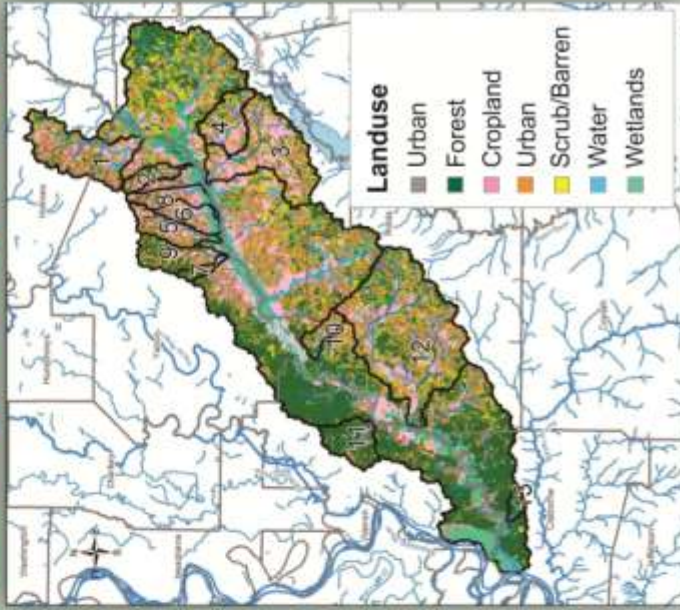
Environmental Stewardship

In all aspects of natural and cultural resources management, the Corps promotes awareness of environmental values and adheres to sound environmental stewardship, protection, compliance and restoration practices. The Corps manages for long-term public access to, and use of, the natural resources in cooperation with other Federal, State, and local agencies as well as the private sector.

In late summer and early fall, virtually all of the Pearl River flow was captured by an area known as Wilson Slough. This left the main channel of the Pearl River in the vicinity of Walkiah bluff completely dry in some locations leaving property owners and local citizens with no opportunity to enjoy the benefits of the river. For more than 20 years, locals tried to get a project to restore flows in the vicinity of Walkiah Bluff. Using an authority established by Congress in 1990 which provided for environmental wetland restoration the Corps began the Pearl River, Walkiah Bluff Flow Distribution Project. The project was designed to restore flows in the Pearl River and once again make it a viable resource for both Mississippi and Louisiana.

Big Black River Watershed

Land Use in the Basin



Environmental Stewardship

Nonpoint loading of sediment in a water body results from the transport of the material into receiving waters by the processes of mass wasting, head cutting, gullying, and sheet and rill erosion. Sources of sediment include:

- Agriculture
- Silviculture
- Rangeland
- Construction sites
- Roads
- Urban areas
- Mass wasting areas
- Gullies
- Surface mining
- In-channel and instream sources
- Historical landuse activities and channel alterations

Authority needed to combat flooding, erosion, and sedimentation problems which leads to streambank caving, loss of fish and wildlife resources, poor water quality and adds to problem of Gulf Hypoxia Zone.



Value to the Nation



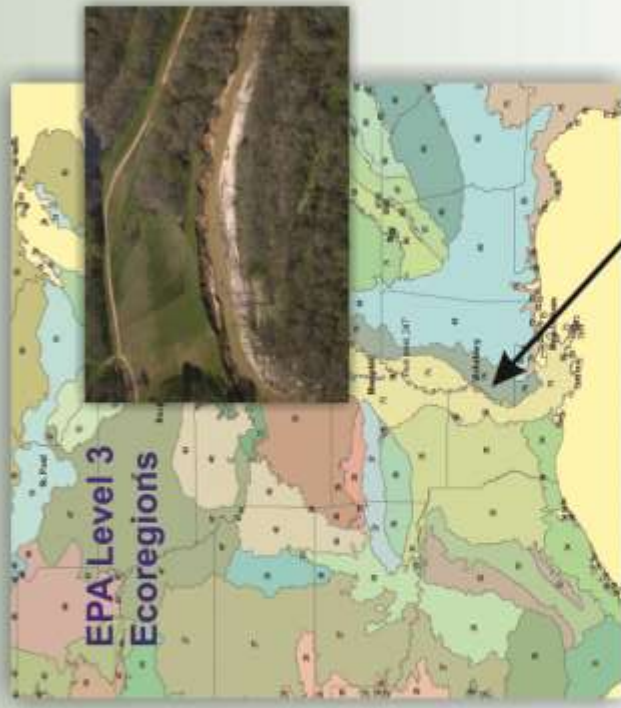
Southwest Tributaries



The basin comprises a drainage area of approximately 3,200 square miles. All or parts of nine counties in southwestern Mississippi are included – Adams, Amite, Claiborne, Copiah, Franklin, Hinds, Jefferson, Lincoln, and Wilkinson. The basin extends in a north-south direction approximately 60 miles from just north of Port Gibson, MS, to the vicinity of the Mississippi-Louisiana state line on the south; it extends in an east-west direction approximately 55 miles from the Mississippi River on the west to Interstate 55 on the east. Three major streams—Buffalo River, Homochitto River, and Bayou Pierre drain most of the area and flow directly into the Mississippi River.

Environmental Stewardship

Seeking authority to combat flooding, erosion, and sedimentation problems which leads to streambank caving, loss of fish and wildlife resources, poor water quality and adds to problem of Gulf Hypoxia Zone.



Mississippi Loess Plain 74



Value to the Nation

Bayou Meto

The project area includes Lonoke, Jefferson, Prairie, Arkansas, and Pulaski Counties and involves the study of 1,350 square miles in a 433,166 acre Improvement Project Area (IPA) with 369,874 acres of irrigated cropland.

Flood Risk Management

The project includes a pump station to evacuate water from the Bayou Meto Basin and reduces flood damage on farmland and stress to bottomland hardwood forests that benefit waterfowl management.

Jacksonville and Sherwood, AR have requested participation in individual Section 205 projects designed to assist with small flood control projects which will improve Flood Risk Management potential for the communities.

Environmental Stewardship

The project area includes 10,000 acres of herbaceous wetland complexes, along with riparian buffers and improvements to the Bayou Meto Wildlife Management Area to provide environmental restoration and enhancement features.

Water Supply

The project has features which divert excess water from the Arkansas River via a delivery system that contains pump stations, incorporates a system of new canals, existing streams, and pipelines to deliver water to depleted areas.

Project Features:

107 Miles of New Canal

1,750 CFS Pump Station

Riparian Buffers

128 Miles of Channel Work

10,000 Acres of Herbaceous Wetland Complexes

132 Miles of Ditch Enlargements

465 Miles of New Pipeline

Continuing
Authorities
Program
Section 205

SMALL FLOOD CONTROL PROJECTS

of the Flood Control Act of 1948

Provides for local protection from
flooding by the construction or
improvement of flood control
works.



Pump Station
No. 1/Reservoir

A pump station that takes excess surface water from the Arkansas River, pumps it up into a reservoir to utilize gravity flow, and puts it into a delivery system for irrigation use.

Little Bayou
Meto Pump Station

A pump station that evacuates water from the Bayou Meto Basin and reduces flood damage on farmland and stress to bottomland hardwood forests that benefit waterfowl.



Value to the Nation

Lower Mississippi River Museum



LMRM
Lower Mississippi River Museum
and Riverfront Interpretive Site

Authorized by Section 103 © of WRDA 1992 and amended by Section 508 (b) of WRDA 2000 and the Energy and Water Development Act of 2006.

Congress authorized the Vicksburg District to construct the Lower Mississippi River Museum and Riverfront Interpretive Site in the form of a regional visitor center incorporating the old Motor Vessel Mississippi in conjunction with other potential riverfront development features planned by the City of Vicksburg, MS.

Visitation:

Though no funds have been spent for promotion of the facility, visitation has grown from 11,000 to over 30,000 in the first two years of operation.

Group Usage:

The facility has been used for meetings and conferences by groups such as:

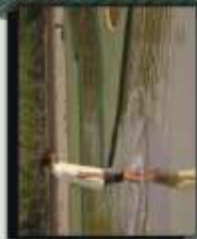
- State Chamber of Commerce
- Junior Auxiliary
- USGS
- Vicksburg Assoc. of Marketing Professionals
- Great MS Road Race
- Coast Guard
- AmeriCorps
- MS-Lou Agri Tourism
- Golding Barge

Strengths:

- Unique facility in the region
- Rising visitor numbers
- Tremendous opportunity for facility usage growth
- Attracts tourists to Vicksburg and Warren County

Challenges:

- Currently funded through MR&T program
- Shrinking available Federal funds
- Only funded through 12 Oct 2014



Value to the Nation

Mat Sinking Unit



The Mat Sinking Unit in concert with the Clearing and Snagging Unit, Bank Grading Unit and Mat Loading Unit supports the Regional Mississippi River and Tributaries (MR&T) Channel Improvement Program with strategic placement of articulated concrete mat along the river. The benefits include minimization of channel migration and protection of flood control structures.

Current Mat Sinking Unit

- Built in 1948
- Multiple upgrades since construction
- Requires large labor force
- Antiquated and obsolete
- Safety regulation compliance challenges

Mississippi Valley Division has initiated a re-design of the mat sinking unit.

New Mat Sinking Unit

- Smaller and more agile
- Require less labor to operate
- Incorporates latest technology
- Incorporates safety specifications

Did you know?

- The Mat Sinking Unit maintains approximately 1000 river miles of main line Mississippi River
- Revetment from Head of Passes in Louisiana to Cairo, Illinois.
- The Mat Sinking Unit replaces on average 1% of revetment per year.
- The Mat Sinking Unit is a unique plant constructed in 1948 which underwent major modifications in 1968.



Value to the Nation



US Army Corps
of Engineers®
Vicksburg District





Funding Information

Funding Information

Cong	Appropriation/Project	FY 14 Allocation	FY 15 President's Budget	Additional Capability Needs	FY 15 TOTAL CAPABILITY	FY 15 WORK WHICH COULD BE ACCOMPLISHED WITH ADDITIONAL FUNDS
Investigations						
MS	Big Black River Watershed, MS	0	0	150	150	Conduct the Initial Watershed Assessment using a system based approach to identify water supply needs, FRM benefits, ecosystem restoration opportunities and to determine Federal interest & benefits
MS	Southwest Tributaries Watershed, MS	0	0	150	150	Conduct the Initial Watershed Assessment using a system based approach to identify water supply needs, FRM benefits, ecosystem restoration opportunities and to determine Federal interest & benefits.
MS	Upper Pearl River Basin (Section 203)	0	0	150	150	Conduct the Initial Watershed Assessment using a system based approach to identify water supply needs, FRM benefits, ecosystem restoration opportunities and to determine Federal interest & benefits.
LA, MS	West Pearl Navigation Dealth (Section 216)	0	0	150	150	Conduct recon level investigation to determine changed conditions and initiate deauthorization of existing project.
Total Investigations		0	0	600	600	
Construction						
MS-1,2,3,4	Section 582 Projects	200	0	11,100	11,100	S&A for on-going projects (\$200); fully fund Ocean Springs PPA (\$1,000); fund additional PPAs (\$9,800)
Total Construction		200	0	11,100	11,100	
Operation and Maintenance						
MS-3	Claborn County Port	1	1	0	1	
AR, LA, MS	Insp of Completed Works	609	512	465	977	Additional Critical Levee Inspections and Channel Inspections performed by OD-MP. Fully funding for the Levee Safety Program. (\$465)
MS-2	Mouth of Yazoo River	175	34	1,048	1,082	Perform maintenance dredging.
MS-4	Pearl River, LA and MS	158	0	0	0	
MS-2	Rosedale Harbor	160	150	0	150	
MS-2	Yazoo River, MS	1,200	9	1,583	1,592	Perform maintenance dredging.
Total Operation and Maintenance		2,326	727	3,396	4,123	Fully fund channel clearing and snagging to maintain the authorized channel at the confluence of the Yazoo River, Vicksburg Harbor and the Yazoo Canal (\$300).
Regulatory Functions						
Flood Control & Coastal Emergency		3,804	3,914	0	3,914	
		406	429	0	429	
SUBTOTAL REGULAR APPROP		6,736	5,070	15,096	20,166	
MR&T Investigations						
AR, LA, MS	Collection & Study of Basic Data	8,370	9,280	3,400	12,680	Collection of data for flood prediction, flowline and geomorphic study efforts.
MS	Yazoo Basin Big Sunflower River, MS, Section 216			150		Conduct recon level investigation to identify changed conditions and determine water supply needs, FRM benefits, ecosystem restoration opportunities and to determine Federal interest & benefits. (\$100)
MS	Yazoo Basin Watershed, MS		0	150	150	Conduct the Initial Watershed Assessment using a system based approach to identify water supply needs, FRM benefits, ecosystem restoration opportunities and to determine Federal interest & benefits (\$100)
MS-1, 2	Big Sunflower River Watershed Study, MS (Quiver River)	0	0	0	0	Study funded to completion from FY14 work plan
Total MR&T Investigations		8,370	9,280	3,700	12,830	
MR&T Construction						
AR, LA, MS	Mississippi River Levees	13,455	12,155	23,500	35,655	Construct Waterproof-Upper Lake Concordia, LA, Item 374-R (\$10,000), Construct Magna Vista-Brunswick, MS, Item 465-L (\$8,000), construct Lake Jackson to Palmetto, it \$11L (\$4,000) and Willow Pt Youngs Pt, LA II 457R (\$1,500)
AR, LA, MS	Channel Improvement Dikes	35,563	3,270	14,900	18,170	Complete Construction Wilson Point Dikes (\$5,400), Const Ben Lomand (\$6,100) and Anconia Chule (\$3,400)
AR, LA, MS	Channel Improvement Revetment		13,330	0	13,330	
MS-1,2	Yazoo Basin, Upper Yazoo Projects	0	0	21,000	21,000	PED and RE management associated with Upper Yazoo Projects (\$1,750), Construct channel item 7C1 and 7C2 (\$13,000), Construct Lamb-Fish Bridge bypass channel (\$8,000), and install mitigation flowmeters on wells (\$250).

Cong	FY 14	FY 15	Additional	FY 15	FY 15
Distr	Appropriation/Project	Allocation	President's Budget	Capability Needs	TOTAL CAPABILITY
MS-1,2	Yazoo Basin, Big Sunflower River Construction	800	0	3,500	3,500
MS-1,2	Yazoo Basin, Backwater	400	0	4,575	4,575
MS-1,2	Yazoo Basin, Delta Headwaters Project	2,830	0	9,000	9,000
Total MR&T Construction		53,048	28,755	76,475	105,230
AR, LA, MS	MR&T Maintenance				
AR, LA, MS	Dredging Maint	9,523	5,023	0	5,023
MS-2	Greenville Harbor, MS	524	24	800	824
MS-2	Vicksburg Harbor, MS	542	42	900	942
AR, LA, MS	Insp of Completed Works	371	371	300	671
AR, LA, MS	Mapping	298	302	300	602
AR, LA, MS	Mississippi River Levees	3,192	2,331	1,700	4,031
AR, LA, MS	Channel Improvement (Revetments & Dikes)	14,052	15,052	18,000	33,052
MS-1	Yazoo Basin, Arkabutla Lake	6,854	5,494	3,570	9,064
MS-1,2	Yazoo Basin, Big Sunflower	185	185	100	285
MS-1	Yazoo Basin, Enid Lake	4,777	4,898	5,360	10,258
MS-1,2	Yazoo Basin, Greenwood	785	807	405	1,212
MS-1	Yazoo Basin, Grenada Lake	5,164	5,705	3,718	9,423
MS-1,2	Yazoo Basin, Main Stem	1,273	1,344	3,741	5,085
MS-1	Yazoo Basin, Sardis Lake	6,493	6,629	7,315	13,944
MS-1,2	Yazoo Basin, Tributaries	944	967	580	1,547
MS-1,2	Yazoo Basin, Whittington Auxiliary Channel	375	394	500	884
MS-1,2	Yazoo Basin, Yazoo Backwater Area	2,226	544	2,580	3,124

FY 15 WORK WHICH COULD BE ACCOMPLISHED WITH ADDITIONAL FUNDS

Construct Steele Bayou Sediment Structures	
Continue operation of the greentree reservoirs in the Delta National Forest and scoping for EIS for Yazoo Backwater Levee enlargement project; Funding required to continue pumping operations at Greentree reservoirs (\$575), Purchase mitigation land and mitigation site development (\$4,000)	
Fully fund five bank stabilization contracts (\$5,000) and two riser pipe contracts (\$3,000); and planning, engineering and design efforts (\$1,000).	
Fully fund channel clearing and snagging to maintain the authorized channel at the confluence of the Yazoo River, Vicksburg Harbor and the Yazoo Canal (\$800).	
Fully fund channel clearing and snagging to maintain the authorized channel at the confluence of the Yazoo River, Vicksburg Harbor and the Yazoo Canal (\$800).	
Red River Backwater, Ouachita-Black River and QD-MP Inspections, levee certifications, channel inspections and I-Walls. Levee Safety requirements demand more detailed inspections; Includes 463 miles of levees, 516 miles of channels, 125 drainage structures, 1 pumping plant & 15 wells (\$300)	
Additional mapping assistance for work in the CAD/GIS topography, hydrographic or geospatial areas.	
Levee Slide Repairs that threaten the integrity of the levees threaten life and safety (\$1,200). Operation and maintenance of mitigation areas (\$500)	
Stone repairs to existing dikes damaged during 2011 flood (\$12,000) and repair to revetment and dikes for channel realignment (\$6,000)	
Complete Pratt Road (\$1,350), P&S to replace Toe Ditch and Outfall structure (\$100), P&S for repair of drop inlets (\$75), Shoreline Erosion repair (\$550), P&S for rec mod (\$250), Rec safety (\$55), Environmental Stewardship (\$275), Update Master plan (\$300) and replace Dam Safety Equip (\$410)	
Fully Fund O&M for Mitigation Lands in the Mississippi Delta (\$100)	
Environmental Stewardship activities (\$570), update project master plan (300), surveys and P&S for areas (\$400), Seismic Eval of Intake Struc (\$150), P&S North Access Bridge (\$100), Blast and paint bridge (\$400), replace riprap on North Abutment of Dam (\$500), P&S handicap accessible fishing pier Outlet Channel (\$100), P&S Water walls (\$100), replace and renovate rec areas \$1,740 and purchase dam safety equipment (\$900).	
Conduct inspections of structures and bridges (\$75), install pipelines to restore structures and gravel surfacing for levee (\$200) and levee slides (\$130).	
Environmental Stewardship activities (\$258), update project master plan (300), surveys and P&S for Yalobusha dredging (\$700), P&S installing concrete ditch on downstream slope of dam (\$500), P&S to replace riprap on upstream face of dam (\$500), purchase dam safety equipment (\$840), Fertilizer on dam (\$115), and update rec features (\$505).	
Install pipelines to restore structures & provide gravel surfacing for levee (\$200), construct levee setback and replace drainage structure at Silent Shade (\$3,000), levee slides (\$260), mitigation O&M (\$150), and critical bridge insp (\$131)	
Environmental stewardship activities (\$400), update master plan (\$475), raise State Park road elevation (\$2,150), P&S to replace outfall structure at end of toe ditch (\$100), replace joint material in dam collection ditches (\$65), replace piezometer at outlet works (\$100), install access rd to south outlet backfill areas (\$50), permanent dike below overflow spillway (\$100), paradise point beach and parking (\$100), and install handicapped fishing pier (\$100). Replace dam safety equipment (\$500), well inspection (\$100), replace piezometers at outlet works (\$250), replace wood stake relief wells (\$400), seismic eval of dam (\$150), construct trench drain on south abutment of dam (\$350), purchase and install lighting (\$75), road paving (\$1,500) and complete modernization of campground (\$250)	
Install pipelines to restore structures & provide gravel surfacing for levee (\$200), McKimney Bayou Pump replacement (\$250), and levee slides (\$130).	
Levee slides and Gravel surfacing for the levee (\$500).	
Design gates (\$200), Mitigation O&M (\$80), Levee Slide Repairs(\$300), Critical Little Sunflower Gate Replacement (\$2,000)	

Cong		FY 14	FY 15	Additional	FY 15	
Distr	Approp/Project	Allocation	President's Budget	Capability Needs	TOTAL CAPABILITY	FY 15 WORK WHICH COULD BE ACCOMPLISHED WITH ADDITIONAL FUNDS
MS-1,2	Yazoo Basin, Yazoo City	714	731	100	831	Rehab of 24 relief wells at Yazoo City Pumping Plant.; Critical work needed to ensure the integrity of the levee system to protect people & property from flooding.
Total MR&T Maintenance		58,295	50,833	49,969	100,802	
	SUBTOTAL MR&T APPROP	119,713	88,868	130,144	219,012	
TOTAL ALL APPROPRIATIONS		126,449	93,938	145,240	239,178	
	Investigations	8,370	9,280	4,300	13,580	
	Construction	53,248	28,755	87,575	116,330	
	Maintenance	60,821	51,560	53,365	104,925	
		122,239	89,595	145,240	234,835	

Supplemental Funding

Vicksburg District Operation Watershed Recovery Projects

Items Funded

109

Funding Required for 109 Items

\$254 M

Items Complete

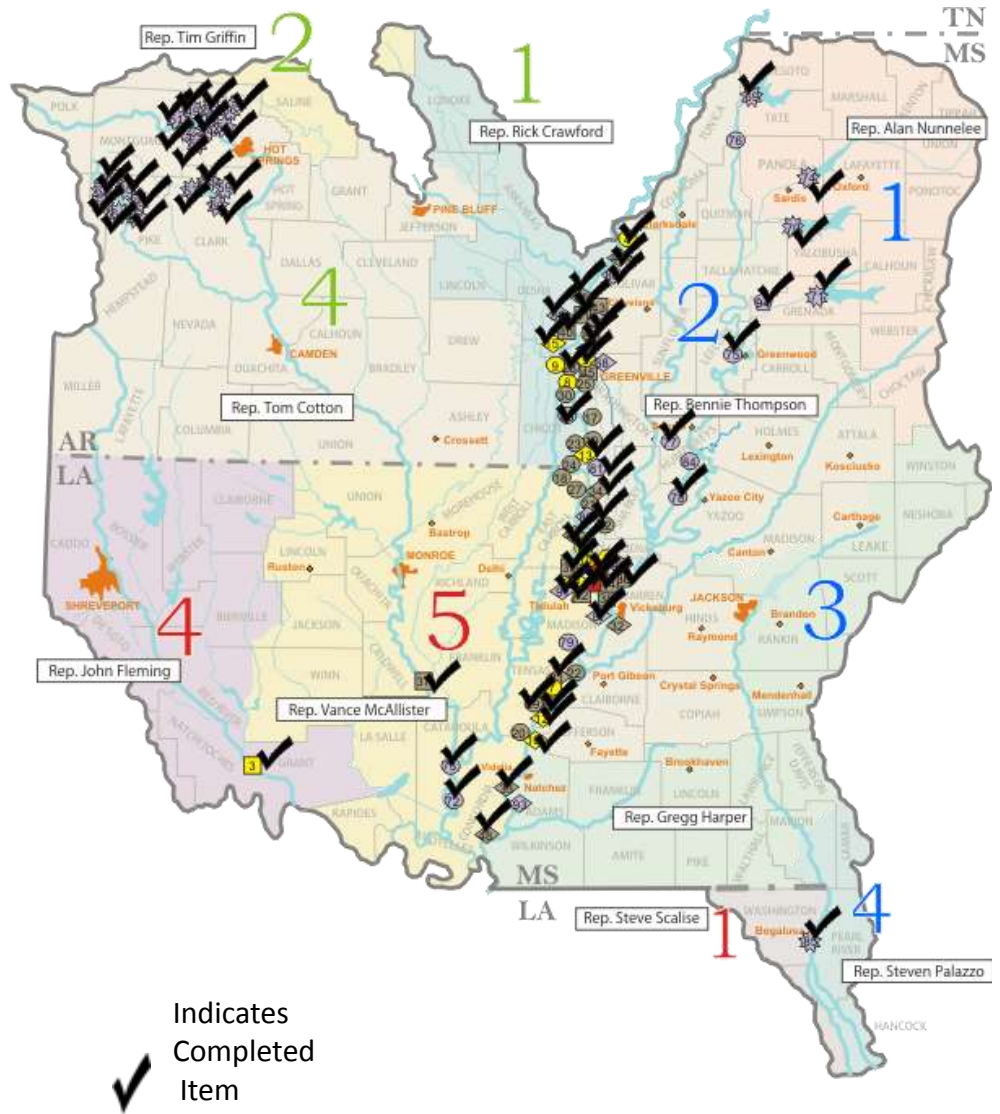
80

Items recently awarded or under construction

29

Items to be initiated

0



USACE FRAGO Risk Classification

Category

- | | |
|-------------|----------------|
| ● Class I | ● MRL |
| ● Class II | ■ Dredge |
| ● Class III | ◆ CI-Revetment |
| ● Class IV | ⚙ O&M |
| | ⬮ Structure |



US Army Corps
of Engineers
Vicksburg District

Project Fact Sheet Supplemental Funding - PL 112-77

O&M and MR&T, Construction and Maintenance (FRM, NAV)

Location: Throughout the Vicksburg District.

Description: The Mississippi River and Tributaries (MR&T), a legacy flood damage reduction system performed, as designed under tremendous and prolonged pressure from the historic 2011 flood event. It is the Flood of Record for most gauges between Cape Girardeau, MO and the Gulf of Mexico. Not a single life was lost to flooding in the areas across seven states protected by the MR&T system. Since its inception, the MR&T system is credited with preventing \$612 billion, or in excess of half a trillion dollars, in cumulative flood damages. At an investment level of \$14 billion, those savings result in a \$44 return on every \$1 invested. The 2011 flood fight is the first time the total watershed system required operation in a synchronized manner in order to manage the highest level of water it has ever seen.

Issues: While the MR&T system performed as designed and managed historical water levels during the Flood of 2011, many sites received damage that threatened the system's performance in future flood seasons. Many of the Flood's critically damaged sites have been repaired within the last 18 months but it is vital to repair the remaining damaged sites to preserve the systems functionality and restore the flood protection provided by the MR&T system.

Importance: Flood control systems protect lives and property. Levees hold back floodwaters; river training structures improve navigation, stabilize bends, and reduce maintenance dredging requirements. Revetment construction maintains channel alignment and protects the banks from erosion while numerous other facilities serve the many public needs across the area.

Risk: Subsequent flood seasons will require extreme vigilance and advanced preparedness to ensure safety and security of citizens, infrastructure and industry. Safe and secure Corps facilities, as well as operation of the MR&T system, is required to preserve the Nation's valuable infrastructure investment.

Consequence: Catastrophic damage to the navigation channel, river banks, and adjacent mainline levee is likely to occur if the system is not repaired/constructed as planned. During the Flood of 2011 an estimated 1.4 million residential and commercial structures, 10 million acres of land, as well as 3.6 million people would have been impacted had the MR&T not functioned as designed.



Figure 1.
LeLand – LaGrange Damage



Figure 2.
Leland – LaGrange Repairs Nearing Completion

Status: All critical items will be complete by 31 December 2014.

Sponsor/Customer: Mississippi Levee Board, Fifth Louisiana Levee Board, Southeast Arkansas Levee District, Red River Waterway Commission, Ouachita River Valley Association

Congressional Interest: Senate: Boozman and Pryor (AR), Landrieu and Vitter (LA), Cochran and Wicker (MS); House: Crawford (AR-1), Cotton (AR-4), Alexander (LA-5), Thompson (MS-2), and Harper (MS-3).



Investigations

Investigations

Investigations

The major objective of the Investigations program is to study projects that provide solutions to water resource problems. The Corps undertakes studies in response to directives (authorizations) from Congress. Congressional authorizations are contained in public law and in resolutions of either the House Public Works and Transportation Committee or the Senate Environment and Public Works Committee.

Most studies are conducted in two phases--reconnaissance and feasibility. The reconnaissance phase is fully funded by the Federal Government and is usually completed in 12 months. The purpose is to define the problem, opportunities, and identify potential solutions. It also determines whether or not planning should proceed into the feasibility phase based on a preliminary appraisal of the Federal interest, cost, benefits, and environmental impacts of the identified potential solution. The phase is completed upon the signing of the Feasibility Cost-Sharing Agreement (FCSA) by the Corps and a project sponsor.

The feasibility phase can take up to 3 years to complete and is cost shared equally between the Federal Government and the non-Federal sponsor. The report results in recommendations to Congress for or against Federal participation in solutions to the water resource problem and opportunities identified in the study. A recommendation for Federal participation identifies a recommended plan/project, generally for construction authorization and funding.

The Preconstruction, Engineering and Design Studies (PED) phase of project development encompasses all planning and engineering necessary for project construction, after release of the report and Division Engineer's public notice on a favorable study. Preparation of design memorandums and plans and specifications will be cost shared in accordance with the cost sharing required for project construction.



West Pearl River Navigation, LA and MS



**US Army Corps
of Engineers**
Vicksburg District

Project Fact Sheet

West Pearl River Navigation, LA and MS

Section 216, FCA 1970

Investigations (NAV)

Location: The West Pearl River Navigation project is located in southeast Louisiana and south Mississippi.

Description: The project was authorized by the Rivers and Harbor Act of 1935. The project, which began in 1938 and was completed in 1956, was designed to provide a minimum depth of 7 feet for navigation from the mouth of the West Pearl River to the vicinity of Bogalusa, LA, a distance of approximately 58 river miles. The project is divided into two open river sections and an approximate 20-mile canal section that includes three locks. Sills across the Bogue Chitto River, the Pearl River, and an unnamed creek maintain navigable depths in the canal section. This study is directed at deauthorization and disposal of the project.

Issues: The Pearl River Navigation project has exceeded its 50-year project life and has no commercial traffic. Efforts to reopen the waterway by the Vicksburg District in the mid-1980s to early 1990s by performing needed maintenance dredging were opposed by noncommercial groups. Maintenance dredging was last performed in 1988 and 1989. The last recorded barge movements occurred in 1991. In 1995, environmental litigation seeking declaratory and injunctive relief was filed, and the Corps was enjoined from dredging. In 1995, Congress officially placed the project in "caretaker" status by directing the limited project funds be used for maintenance of caretaker status. The project is in an unmanned caretaker status at this time. An Initial Appraisal Report was prepared recommending deauthorization of the project.

Importance: Funds have been requested for a New Start reconnaissance study directed at deauthorization and disposal of the project.

Risk: Recent engineering assessments completed for the lock facilities indicated that the sheet pile lock walls are rapidly corroding.

Consequence: Locks are deteriorating and are potentially unsafe.



Amount That Could Be Used in FY 15: Funds in the amount of \$150,000 could be used to complete a reconnaissance study directed at deauthorization and disposal of the project.

Project Sponsor/Customer: N/A

Congressional Interest: Senate: Landrieu (LA) and Cochran (MS); House: Palazzo (MS-04).

Phase	Estimated Federal Cost of Phase	Federal Funding Thru FY 14	FY 15 Budget	FY 15 Total Capability
Reconnaissance	\$150,000	\$0	\$0	\$150,000



Big Black River Basin Watershed, MS



**US Army Corps
of Engineers**
Vicksburg District

Project Fact Sheet

Big Black River Watershed, MS

Section 729 of WRDA of 1986 as amended by Section 202 of WRDA 2000

Investigations (FRM) – NEW START

Location: The Big Black River flows through the central portion of Mississippi, beginning in Webster County near the town of Eupora and meandering southwesterly for approximately 300 miles to its outlet at the Mississippi River, twenty-five miles south of Vicksburg.

Description: The Big Black River Watershed is approximately 2,000,000 acres comprising 10 Mississippi counties including portions of the Mississippi state capital, Jackson. The estimated population within the Big Black River watershed exceeds 176,000, with residents primarily located around Jackson and surrounding communities. The Big Black River watershed includes 3 of the fastest developing residential and business areas in the state.

Issues: Lack of flood risk management infrastructure in the basin has resulted in significant economic losses and increased bank caving and erosion has caused sediment and bank stability problems downstream.

Stakeholder Concerns: Stakeholder concerns in the area revolve around sedimentation and bank erosion, ecosystem restoration, and increasing flooding risks of the Big Black Pearl River and its tributaries.



**Big Black River at Fisher Ferry Road
Warren/Hinds Counties, MS**

Scope of Study: Reconnaissance level investigations will focus on identifying existing conditions within the project area, and based on current conditions; identify Corps and other partner's opportunities to address stakeholder concerns. There are potential opportunities to provide value to the Nation in the FRM and ENR business lines.

Possible Solutions: Opportunities exist to determine the needs in the watershed and investigate new alternatives to alleviate the flood risk, bank erosion and declining aquatic habitat. This would benefit the entire project area by reducing flooding concerns, enhancing wildlife and aquatic habitat, and non-point source pollution within the watershed.

Sponsor: The Mississippi Soil and Water Conservation Commission has expressed interest in seeing the Initial Watershed Assessments conducted and the potential of sponsoring any feasibility level studies resulting from the assessment.

Cost: \$150,000



Pearl River Basin Watershed, LA and MS



US Army Corps
of Engineers
Vicksburg District

Project Fact Sheet

Pearl River Basin Watershed, LA and MS

Section 729 of WRDA of 1986 as amended by Section 202 of WRDA 2000

Investigations (FRM) – NEW START

Location: The Pearl River Basin Watershed is approximately 5.5 million acres including 23 Mississippi Counties and 3 Louisiana parishes.

Description: From the headwaters in Choctaw and Winston counties to journey's end at the Gulf of Mexico, the Pearl River Basin is a place of contrasts with diverse landscapes and resources. In the northern part of the basin, the shallow streams flow freely through the rolling hills. About a third of the way along their journey, waters in the Pearl River spread out behind the dam at Ridgeland to form Barnett Reservoir. From there, the Pearl River widens through the center part of the basin as it flows south. In the lower portion, there are two outlet channels, the main river channel that forms the state boundary between Mississippi and Louisiana, and the West Pearl River in Louisiana. The West Pearl and Pearl rivers flow through broad floodplains of flat terrain. Here the rivers deepen and meander through lowland forests, marshes, dense cypress-tupelo swamps and estuaries. Near its mouth at Lake Borgne, the Pearl River flows into the Mississippi Sound and out into the Gulf of Mexico. In place flood risk management infrastructure includes 2 earthen levee systems, 4 gated outlets and 2 pumping stations that date back to 1968 in and around the Jackson, Mississippi fairgrounds area. In addition there are 3 locks on the Pearl River that provide 2 open river sections.

Issues: The current levee systems do not meet the demands of current and anticipated future development, and the existing locks in the lower Pearl River have been placed in caretaker status due to lack of use. Recently, these structures have been assessed and it was determined that the sheet pile walls are rapidly corroding and may become unsafe.

The Mississippi Department of Environmental Quality is currently investigating non-point source pollution control measures in the Pearl River Basin because water quality is significantly influenced in certain areas of the watershed by diverse land based urban development and stormwater runoff, agricultural activities, and sedimentation. Natural resources within the watershed include 36,000 acre Bogue Chitto National Wildlife Refuge, portions of the 67,000 acre Tombigbee National Forest, and portions of the 178,500 acre Bienville National Forests, and various wildlife management areas in both states. Species of concern within the watershed include ringed-necked turtle, American

alligator, gopher tortoise, inflated heel-splitter mussel and the Gulf sturgeon.



Walkiah Bluff Weir

Stakeholder Concerns: Stakeholder concerns in the area revolve around non-point source pollution, ecosystem restoration, increased flooding risks, and bank erosion of the Upper Pearl River and its tributaries.

Scope of Study: Reconnaissance level investigations will focus on identifying changed existing conditions within the project area, and based on current conditions; identify Corps and other partner's opportunities to address stakeholder concerns. There are potential opportunities to provide value to the Nation in the FRM and ENR business lines.

Possible Solutions: Opportunities exist to determine the needs in the watershed and investigate new alternatives to alleviate the flood risk and aging infrastructure. This would benefit the entire project area by reducing flooding concerns, enhancing wildlife and aquatic habitat, and non-point source pollution within the watershed.

Sponsor: The Pearl River Basin Development District has expressed their interest in seeing the Initial Watershed Assessments conducted and the potential of sponsoring any feasibility level studies resulting from the assessment.

Cost: \$150,000



Southwest Tributaries Watershed, MS



US Army Corps
of Engineers
Vicksburg District

Project Fact Sheet

Southwest Tributaries Watershed, MS

Section 729 of WRDA of 1986 as amended by Section 202 of WRDA 2000

Investigations (FRM) – NEW START

Location: The Southwest Tributaries Watershed is approximately 2,000,000 acres comprising 9 counties in southwestern Mississippi.

Description: Three major streams in the basin are the Buffalo River, Homochitto River and Bayou Pierre that drain most of the area directly into the Mississippi River. Most streams in this basin have good flow, clear water, and sandy stream bottoms. In general, the streams are of fair to good water quality, especially those streams that flow through the Homochitto National Forest.

Issues: The Southwest Tributaries Basin needs authority to combat flooding, erosion, and sedimentation problems. Bayou Pierre is experiencing an alarming land loss rate due to bank caving and head-cutting, directly impacting the endangered Bayou Darter and its habitat. Bayou Pierre is the only remaining habitat of the Bayou Darter and if the stream continues to deteriorate the species could be in jeopardy. In addition, effluent runoff from poultry industry could lead to stream contamination and fish kills. The watershed investigation could lead to new alternatives to combat these problems and directly benefit the habitat of the Bayou Darter.

The Mississippi Department of Environmental Quality (MDEQ) has been monitoring water quality in the Southwest Tributaries Basin and has concluded that most streams within this basin have fair to good water quality. Sources of water quality concern typically stem from surface mining run-off, agricultural (poultry, cattle, row-crop) and forestry run-off, and municipal and stormwater discharges. Natural resources within the Southwest Tributaries Basin include but are not limited to the 191,000 acre Homochitto National Forest and several state-operated wildlife management areas (Copiah County, Caney Creek, Caston Creek, Marion County, Canemount).

Stakeholder Concerns: Stakeholder concerns in the area revolve environmental restoration/ protection and non-point source pollution.



Coles Creek in Jefferson County, MS

Scope of Study: Watershed Planning is an approach for managing water resources within specified drainage areas or watersheds and addresses problems in a holistic manner that reflects the interdependency of water uses, competing demands, and the desires of a wide range of stakeholders in addressing watershed problems and opportunities. Reconnaissance level investigations will focus on identifying changed existing conditions within the project area, and based on current conditions, identify Corps and other partner's opportunities to stabilize channels, reduce sedimentation, and restore aquatic habitat. There are potential opportunities to provide value to the Nation in the ENR business line.

Possible Solutions: Opportunities exist to investigate alternatives to combat the environmental degradation within portions of the Southwest Tributaries Basin from a basin wide perspective. Protection of these areas could have a significant positive impact on the endangered bayou darter.

Sponsor: The Mississippi Soil and Water Conservation Commission have expressed their interest in the Initial Watershed Assessment being conducted and the possibility of sponsoring any feasibility level studies resulting from the outcome of the assessment.

Cost: \$150,000



Construction

Construction

Construction

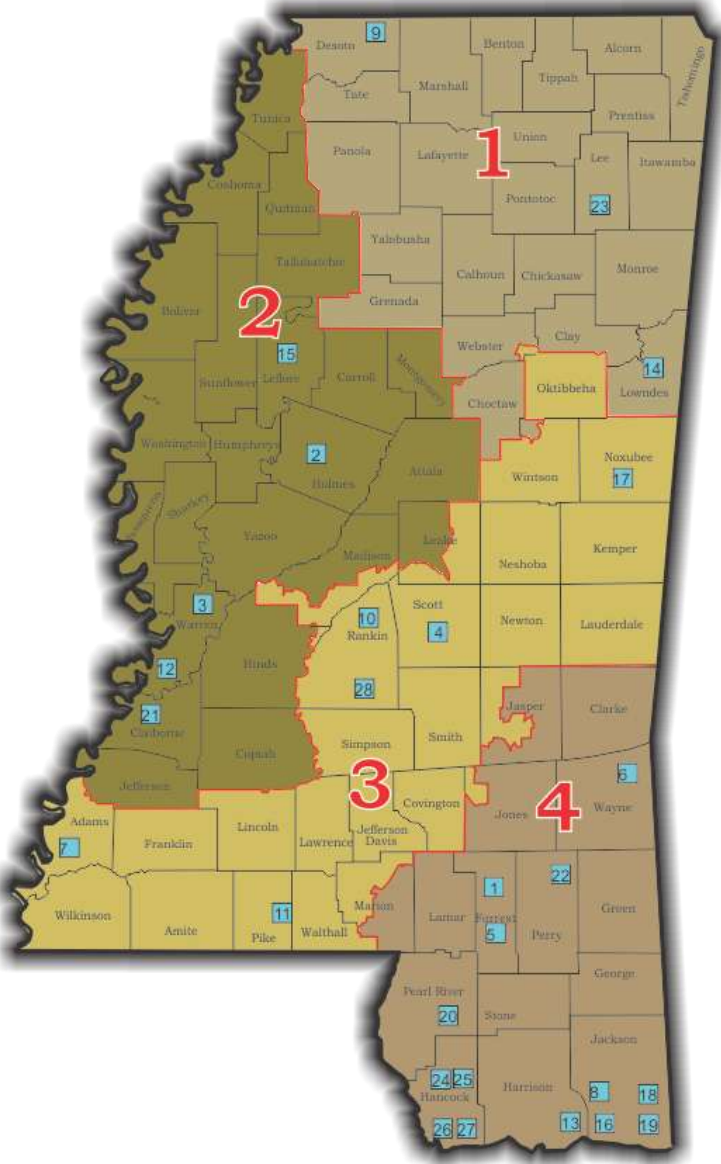
The main objective of a construction program is to complete authorized and appropriated projects as economically and quickly as practicable within program constraints and consistent with national priorities.

Under the provisions of a cost-shared project, prior to initiation of construction, the non-Federal sponsor and the government enter into a Project Partnership Agreement (PPA). The PPA describes all of the requirements and responsibilities relating to construction of the project including items of local cooperation required from the non-Federal

592 Projects

Ongoing Projects

- 1 Brooklyn
- 2 Cruger
- 3 Culkin
- 4 Forest
- 5 Hattiesburg
- 6 Hiwantee
- 7 Natchez
- 8 Ocean Springs
- 9 Olive Branch
- 10 Pearl River Valley
- 11 Summit
- 12 Vicksburg
- 13 Biloxi
- 14 Columbus
- 15 Greenwood
- 16 Jackson County
- 17 Macon
- 18 Moss Point
- 19 Pascagoula
- 20 Pearl River County
- 21 Port Gibson
- 22 Richton
- 23 Tupelo
- 24 Waveland
- 25 Waveland
- 26 Waveland
- 27 Waveland
- 28 West Rankin



Brooklyn



Pascagoula



Columbus



Richton

592 Projects, MS



**US Army Corps
of Engineers**
Vicksburg District

Project Fact Sheet

Mississippi Environmental Infrastructure, MS (Section 592)

Sec 592, WRDA 99; Sec 120, E&WDAA 2004; Sec 101, CAA 2005; Sec 5097, WRDA 07;
Sec 110, E&WDAA 2010

Construction (WTR)

Location: Projects are located in multiple towns, cities, and municipalities throughout the State of Mississippi.

Description: The Mississippi (Section 592) project provides environmental infrastructure assistance to communities throughout the State of Mississippi. This includes project design and construction assistance for wastewater treatment and related facilities, combined sewer overflows, water supply and storage and related facilities, environmental restoration, and surface water resource protection and development.

Issues: The Section 592 program provides communities, associations, and municipalities in the State of Mississippi with the much needed funding to upgrade and replace environmental infrastructure systems listed under the above program description.

Importance: The 592 program is a 75/25 cost share, reimbursed to the sponsor. As part of the program, the Vicksburg District provides limited design review, National Environmental Policy Act compliance, construction inspection, and invoice processing for reimbursements. These costs, while a part of the total project costs, are not covered in the obligated amounts for construction.

Risk: Without the assistance of the Section 592 program the majority of the towns, cities, and municipalities will remain noncompliant and in violation of both state and Federal laws concerning environmental infrastructure.

Consequence: A future without the Section 592 program jeopardizes the safety and health of Mississippi's fragile clean water supply, storage, wastewater treatment, and other environmental issues.

592 Projects

Ongoing Projects

Brooklyn
Clugger
Gulfport
Forest
Hattiesburg
Horse
Hatchee
Ocean Springs
Olive Branch
Pearl River Valley
Summit
Vicksburg
Biloxi
Columbus
Greenwood
Jackson County
Macon
Moss Point
Pascagoula
Pearl River County
Port Gibson
Ridgely
Tupelo
Waveland
Waveland
Waveland
Waveland
West Rankin



Activities for FY 14: Funds are being used for management in support of ongoing projects.

Acquisition Strategy: None.

Amount That Could Be Used in FY 15: Funds in the amount of \$11,100,000 could be used for management of 29 ongoing fully fund regular and ARRA funded environmental infrastructure projects (\$300); fully fund the balance of Oceans Springs PPA (\$1,000); and execution of multiple new PPAs (\$9,800)

Project Sponsor/Customer: Multiple

Congressional Interest: Senate: Wicker and Cochran (MS); House: Nunnelee (MS-1), Thompson (MS-2), Harper (MS-3), Palazzo (MS-4).

Phase	Estimated Federal Cost of Phase	Federal Funding Thru FY 13	FY 14 Allocation	FY 15 Budget	FY 15 Total Capability
Construction	\$200,000,000	\$120,970,000	\$200,000	\$0	\$11,100,000

Ongoing 592 Projects

Project	PCA/PPA Total Project Cost	Federal (75%)	Non-Federal (25%)	PPA Date	Estimated/ Actual Finish Date	Congressional District
REGULAR FUNDS						
Brooklyn	3,485,000.00	2,613,750.00	871,250.00	08/19/08	08/28/14	Palazzo
Cruger	619,000.00	464,250.00	154,750.00	04/20/05	06/27/14	Thompson
Culkin	1,560,950.00	1,170,712.00	390,238.00	04/20/05	01/31/15	Thompson
Forest	7,962,600.00	5,971,950.00	1,990,650.00	04/26/05	09/30/14	Harper
Hattiesburg (R 8/19/11)	5,191,600.00	3,893,700.00	1,297,900.00	04/17/08	12/31/14	Palazzo
Hiwannee Wtr Assoc, Inc.	1,101,000.00	825,750.00	275,250.00	09/22/10	12/31/14	Palazzo
Natchez	12,453,051.00	9,339,788.00	3,113,263.00	04/20/05	03/31/15	Harper
Ocean Springs	4,045,000.00	3,033,750.00	1,011,250.00	09/22/10	04/30/15	Palazzo
Olive Branch (R 9/29/09)	14,649,885.00	10,987,414.00	3,662,471.00	12/08/04	08/31/14	Nunnelee
Pearl R. V. Wtr Sup Dist	5,995,100.00	4,466,325.00	1,488,775.00	09/10/10	10/30/14	Harper
Summit	405,789.00	304,342.00	101,447.00	09/10/10	06/28/15	Harper
Vicksburg #2	3,271,538.00	2,453,654.00	817,884.00	09/17/10	07/31/15	Thompson
Total Regular:	60,740,513.00	45,525,385.00	15,175,128.00			
ARRA FUNDS						
Biloxi	2,587,500.00	1,940,625.00	646,875.00	01/19/10	09/30/15	
Columbus	1,400,708.00	1,050,531.00	350,177.00	01/26/10	09/30/15	
Greenwood	2,268,725.00	1,701,544.00	567,181.00	01/29/10	09/30/15	Thompson
Jackson Co.	7,941,490.00	5,956,118.00	1,985,372.00	11/24/09	09/30/15	Palazzo
Macon	3,132,400.00	2,349,300.00	783,100.00	03/28/08	09/30/15	Harper
Moss Point	4,570,000.00	3,427,500.00	1,142,500.00	03/25/10	09/30/15	Palazzo
Pearl River Co.	920,851.00	690,638.00	230,213.00	01/19/10	09/30/15	Palazzo
Port Gibson	1,346,457.00	1,009,843.00	336,614.00	03/16/10	09/30/15	Thompson
Richton	2,025,054.00	1,518,791.00	506,263.00	09/03/09	09/30/15	Palazzo
Tupelo	8,293,700.00	6,220,275.00	2,073,425.00	05/12/06	09/30/15	Nunnelee
Waveland-Connector	1,097,202.00	822,901.00	274,301.00	04/22/11	09/30/15	Palazzo
Waveland-East	826,046.00	619,535.00	206,511.00	04/22/11	09/30/15	Palazzo
Waveland-Gulfside	782,062.00	586,547.00	195,515.00	04/22/11	09/30/15	Palazzo
Waveland-West	1,008,077.00	756,058.00	252,019.00	04/22/11	09/30/15	Palazzo
West Rankin Util Auth #2	8,825,000.00	6,618,750.00	2,206,250.00	02/25/10	09/30/15	Harper
Total ARRA:	47,025,267.00	35,268,956.00	11,756,316.00			
TOTAL Program:	111,784,758.00	83,808,571.00	27,936,187.00			

Pending 592 Projects

Community/ Non-Federal Sponsor	Description	County	Congressional District	Total Cost	NF Cost	Fed Cost
Batesville	Phase II Wastewater Improvements Stage 1	Panola	Thompson	\$1,004,000	\$251,000	\$753,000
Batesville	Phase IV Sand Creek Gravity Sewer Imprv Stg 1	Panola	Thompson	\$1,015,600	\$253,900	\$761,700
Batesville	Phase IV Sand Creek Gravity Sewer Imprv Stg 2	Panola	Thompson	\$959,400	\$239,850	\$719,550
Bolton	Water System Improvements	Hinds	Thompson	\$223,478	\$55,870	\$167,609
Brandon, City of	Water Supply Improvements	Rankin	Harper	\$3,391,850	\$847,963	\$2,543,888
Carthage	Hwy 16 Interceptor Rehabilitation	Leake	Thompson	\$1,000,000	\$250,000	\$750,000
Claiborne County	Pattison Wastewater Collection and Treatment	Claiborne	Thompson	\$3,000,000	\$750,000	\$2,250,000
Cleveland	Wastewater Treatment Plant Rehab	Bolivar	Thompson	\$6,400,000	\$1,600,000	\$4,800,000
Coahoma County	Moon Lake Sewer Collection and Treatment	Coahoma	Thompson	\$5,308,936	\$1,327,234	\$3,981,702
Corinth	Surface Water Supply System	Alcorn	Nunnelee	\$45,000,000	\$11,250,000	\$33,750,000
Crystal Springs	Water/Sewer System Infrastructure Improvement	Copiah	Thompson	\$4,645,000	\$1,161,250	\$3,483,750
Ellisville	Wastewater Treatment System Upgrade	Jones	Palazzo	\$7,300,000	\$1,825,000	\$5,475,000
Greenville	Water System Improvements	Washington	Thompson	\$3,030,000	\$757,500	\$2,272,500
Greenville	Water System Improvements	Washington	Thompson	\$10,720,000	\$2,680,000	\$8,040,000
Harrison County Utility Authority	Water/Sewer System Expansn Saucier and Hwy 68	Harrison	Palazzo	\$3,900,000	\$975,000	\$2,925,000
Hattiesburg	Stormwater Drainage Improvements PH I	Forrest	Palazzo	\$1,300,000	\$325,000	\$975,000
Hattiesburg	Stormwater Drainage Improvements PH II	Forrest	Palazzo	\$1,700,000	\$425,000	\$1,275,000
Hilldale Water District	Water System Connection for backup Supply	Warren	Thompson	\$416,880	\$104,220	\$312,660
Hilldale Water District	Replace Pressure Filters at 2 Water Treatment Plants	Warren	Thompson	\$513,000	\$128,250	\$384,750
Hilldale Water District	Water Distribution Line Replacement	Warren	Thompson	\$1,646,525	\$411,631	\$1,234,894
Hilldale Water District	700 Well and Water Treatment Plant	Warren	Thompson	\$2,295,000	\$573,750	\$1,721,250
Hilldale Water District	300 Gallon Elevate Water Storage Tank	Warren	Thompson	\$1,300,050	\$325,013	\$975,038
Horn Lake	Sewer Improvements PH I 2010	Desoto	Nunnelee	\$1,059,582	\$264,896	\$794,687
Horn Lake	Water Well & Elev Stor Tank PH 2 2011	Desoto	Nunnelee	\$1,562,608	\$390,652	\$1,171,956
Horn Lake	Inflow/Infiltration PH 3 2012	Desoto	Nunnelee	\$2,393,776	\$598,444	\$1,795,332
Jackson	Sanitary Sewer Improvements	Hinds	Thompson	\$12,300,000	\$3,075,000	\$9,225,000
Kiln Water & Fire Protection District	Water System Improvements	Hancock	Palazzo	\$5,330,000	\$1,332,500	\$3,997,500
Laurel	Water and Sewer Rehabilitation Improvements	Jones	Palazzo	\$5,361,209	\$1,340,302	\$4,020,907
Lexington	Sewer System Repair/Replacement	Holmes	Thompson	\$2,611,621	\$652,905	\$1,958,716
Louisville	Wastewater Improvements and New Service	Winston	Harper	\$7,718,008	\$1,929,502	\$5,788,506
Lumberton	Sewer System Rehab & Expansion	Lamar	Palazzo	\$2,627,530	\$656,883	\$1,970,648
Lumberton	Sewer System Rehab	Lamar	Palazzo	\$2,627,530	\$656,883	\$1,970,648
Madison County Wastewater Authority	Regional Wastewater System	Rankin	Harper	\$2,000,000	\$500,000	\$1,500,000
McComb	Surface Drainage System Improvements	Pike	Harper	\$2,800,000	\$700,000	\$2,100,000
McComb	Park Lane Road Interceptor Rehab	Pike	Harper	\$2,050,000	\$512,500	\$1,537,500
McComb	Road Lift Station Rehab	Pike	Harper	\$240,000	\$60,000	\$180,000
McComb	North Lagoon Pump Station and F. Main	Pike	Harper	\$2,420,000	\$605,000	\$1,815,000
McComb	East Interceptor	Pike	Harper	\$2,600,000	\$650,000	\$1,950,000
Mendenhall	Sanitary Sewer Improvements	Simpson	Harper	\$1,546,529	\$386,632	\$1,159,897
Meridian	Long Creek Reservoir Dam Repair	Lauderdale	Harper	\$2,000,000	\$500,000	\$1,500,000
Meridian	B Street Water Treatment Plant	Lauderdale	Harper	\$775,000	\$193,750	\$581,250
Meridian	Sanitary Sewer Collection System	Lauderdale	Harper	\$3,000,000	\$750,000	\$2,250,000
Mound Bayou	Water and Sewer Improvements	Bolivar	Thompson	\$7,630,680	\$1,907,670	\$5,723,010
Noxapater	Wastewater System Improvements	Winston	Harper	\$725,000	\$181,250	\$543,750
Okhissa Lake Sewer District		Franklin	Harper	\$3,000,000	\$750,000	\$2,250,000
Pelahatchie	Wastewater System Improvements	Rankin	Harper	\$6,500,000	\$1,625,000	\$4,875,000
Pike County	Old Industrial Park P. Station and F. Main	Pike	Harper	\$735,000	\$183,750	\$551,250
Pike County	New Industrial Park Pump Stat and F. Main	Pike	Harper	\$2,900,000	\$725,000	\$2,175,000
Port Bienville	Drainage Improvements	Hancock	Palazzo	\$2,701,655	\$675,414	\$2,026,241
Prentiss County	Sanitary Sewer System Construction Phase 2	Prentiss	Nunnelee	\$2,535,000	\$633,750	\$1,901,250
Sallis	Wastewater Collection and Treatment System	Attala	Thompson	\$2,015,150	\$503,788	\$1,511,363
Shaw, City of	Sewage and Water Improvements	Bolivar	Thompson	\$2,900,000	\$725,000	\$2,175,000
Southaven	Sewer Improvements	Desoto	Nunnelee	\$6,550,335	\$1,637,584	\$4,912,751
Summit	Calhoun Street Interceptor Repair	Pike	Harper	\$775,000	\$193,750	\$581,250
Summit	South Lagoon Pump Station and F. Main	Pike	Harper	\$1,400,000	\$350,000	\$1,050,000
Wesson	Water and Sewer Improvements	Copiah	Thompson	\$1,647,700	\$411,925	\$1,235,775
West Rankin Utilitiy Authority	Water and Sewer Improvements	Rankin	Harper	\$2,600,000	\$650,000	\$1,950,000
TOTAL PENDING SECTION 592				\$213,708,632	\$53,427,158	\$160,281,474

The 8 Authorities of the Continuing Authorities Program (CAP)

Section 14

Emergency Streambank & Shoreline Protection - Flood Control Act of 1946 as amended by WRDA 1996

This authority is to prevent erosion damages to highways, bridge approaches, public works, and other nonprofit public facilities by the emergency construction or repair of streambank and shoreline erosion protection. These are two-phase projects: Study cost for the first \$100,000 is 100% Federal with any amount over \$100,000 cost-shared 50% Federal and 50% non-Federal. Implementation costs are cost-shared 65% Federal and 35% non-Federal with a Federal funding limit of \$1.5 million per project and a national program limit of \$15 million.

Section 107

Small Navigation Projects - River and Harbor Act of 1960

This authority provides improvement to navigation including dredging of channels, widening of turning basins, and construction of navigation aids. These are two-phase projects: Study cost for the first \$100,000 is 100% Federal with any amount over \$100,000 cost-shared 50% Federal and 50% non-Federal. Implementation costs are cost-shared 80% Federal and 20% non-Federal with a Federal funding limit of \$7 million per project and a national program limit of \$35 million.

Section 205

Small Flood Control Projects - Flood Control Act of 1948 as amended by WRDA 1999

This authority for local protection from flooding by the construction or improvement of flood control works such as levees, channels, and dams. Nonstructural alternatives are also considered. These are two-phase projects: Study cost for the first \$100,000 is 100% Federal with any amount over \$100,000 cost-shared 50% Federal and 50% non-Federal. Implementation costs are cost-shared 65% Federal and 35% non-Federal with a Federal funding limit of \$7 million per project and a national program limit of \$55 million.

Section 206

Aquatic Ecosystem Restoration - Water Resources Development Act of 1996, as amended by WRDA 1996

This authority provides for restoration of degraded aquatic ecosystems. A restoration project is adopted for construction only after investigation shows that the restoration will improve the environment, and/or elements and features of an estuary is in the public interest, and is cost effective. These are two-phase projects: Study cost for the first \$100,000 is 100% Federal with any amount over \$100,000 cost-shared 50% Federal and 50% non-Federal. Implementation costs are cost-shared 65% Federal and 35% non-Federal with a Federal funding limit of \$5 million per project.

Section 1135

Project Modification for Improvements to the Environment - Water Resources Development Act of 1986 as amended by WRDA 1996 and WRDA 1999

This authority provides for ecosystem restoration through modification to Corps structures or operation of Corps structures or implementation of restoration features when the construction of Corps projects has contributed to degradation of the quality of the environment. These are two-phase projects: Study cost for the first \$100,000 is 100% Federal with any amount over \$100,000 cost shared 50% Federal and 50% non-Federal. Implementation costs are cost-shared 75% Federal and 25% non-Federal with a Federal funding limit of \$5 million per project and a national program limit of \$40 million.

Section 208

Snagging and Clearing for Flood Control- Flood Control Act of 1954

This authority provides improvements for flood control by removing accumulated snags and other debris, and clearing and straightening of the channels in streams in the interest of flood control. Study cost for the first \$100,000 is 100% Federal with any amount over \$100,000 cost-shared 50% Federal and 50% non-Federal. Implementation costs are cost-shared 65% Federal and 35% non-Federal with a \$500,000 Federal limit. This Federal cost limitation includes all project-related costs for feasibility studies, planning, engineering, construction, supervision, and administration.

Section 204

Ecosystem Restoration Projects in Connection with Dredging Water Resources Development Act of 1992, as amended

This authority provides for protection, restoration, and creation of aquatic and wetland habitats in connection with construction and maintenance dredging of an authorized project. Study cost for the first \$100,000 are 100% Federal with any amount over \$100,000 cost shared 50% Federal and 50% non-Federal. Implementation costs are cost-shared 75% Federal and 25% non-Federal.

Section 111

Mitigation of Shore Damages- Water Resources Development Act of 1968, as amended

This authority provides for the prevention or mitigation of erosion damages to public or privately owned shores along the coastline of the United States when these damages are a result of a Federal navigation project. This authority cannot be used for shore damages caused by river bank erosion or vessel-generated wave wash. It is not intended to restore shorelines to historic dimensions, but only to reduce erosion to the level that would have existed without the construction of a Federal navigation project. Cost sharing may not be required for this program. If the Federal cost limitation is exceeded, specific Congressional authorization is required. Study cost for first \$100,000 is 100% Federal with any amount over \$100,000 cost shared 50% Federal and 50% non-Federal. Implementation costs are cost-shared 65% Federal and 35% non-Federal with a Federal funding limit of \$5 million per project.

Operation and Maintenance

Operation and Maintenance

Operation and Maintenance (O&M)

The Operation and Maintenance program focuses on the need to preserve the existing Civil Works Infrastructure such as locks, dams, navigation channels, recreation facilities and provide adequate levels of service.



Port of Rosedale, Mississippi



**US Army Corps
of Engineers**
Vicksburg District

Project Fact Sheet Rosedale Harbor, MS

River and Harbor Act of 1960, Section 107

Operation and Maintenance (NAV)

Location: Rosedale Harbor is a slack-water, shallow draft harbor located along the Mississippi River in Bolivar County, MS.

Description: The harbor channel is 2.7 miles long by 150 feet wide and the turning basin is 1,000 feet long and 400 feet wide. Both the harbor channel and turning basin have a maintained minimum depth of 9 feet.

Issues: Depending on river stages, the harbor experiences low-water conditions starting in July and lasting through November of each year. Maintenance dredging allows this port to continue shipping during these stages.

Importance: The harbor provides a transportation need for water-oriented industries in Bolivar County, MS. It sustains approximately 325 jobs.

Risk: If dredging is not performed, this harbor will first begin to "light load" barges, in which barges will not be loaded to full capacity resulting in less efficient transportation. As the river continues to fall, there will not be enough water for the towboats to carry these barges to the river and the harbor will be required to close. Without maintenance dredging funds, this harbor will lose project dimensions during the busiest time of the year when crops are harvested and shipped.

Consequence: The loss of a dependable, reliable and safe harbor will have significant adverse impacts on the region due to the increased shipping costs by rail and trucks. Many small communities and farmers will be forced to seek other more costly means to move their products. Harbor employees along with the business located in the harbor would be laid off.



Rosedale Harbor

Activities for FY 14: Funds are being used for maintenance dredging of the Harbor.

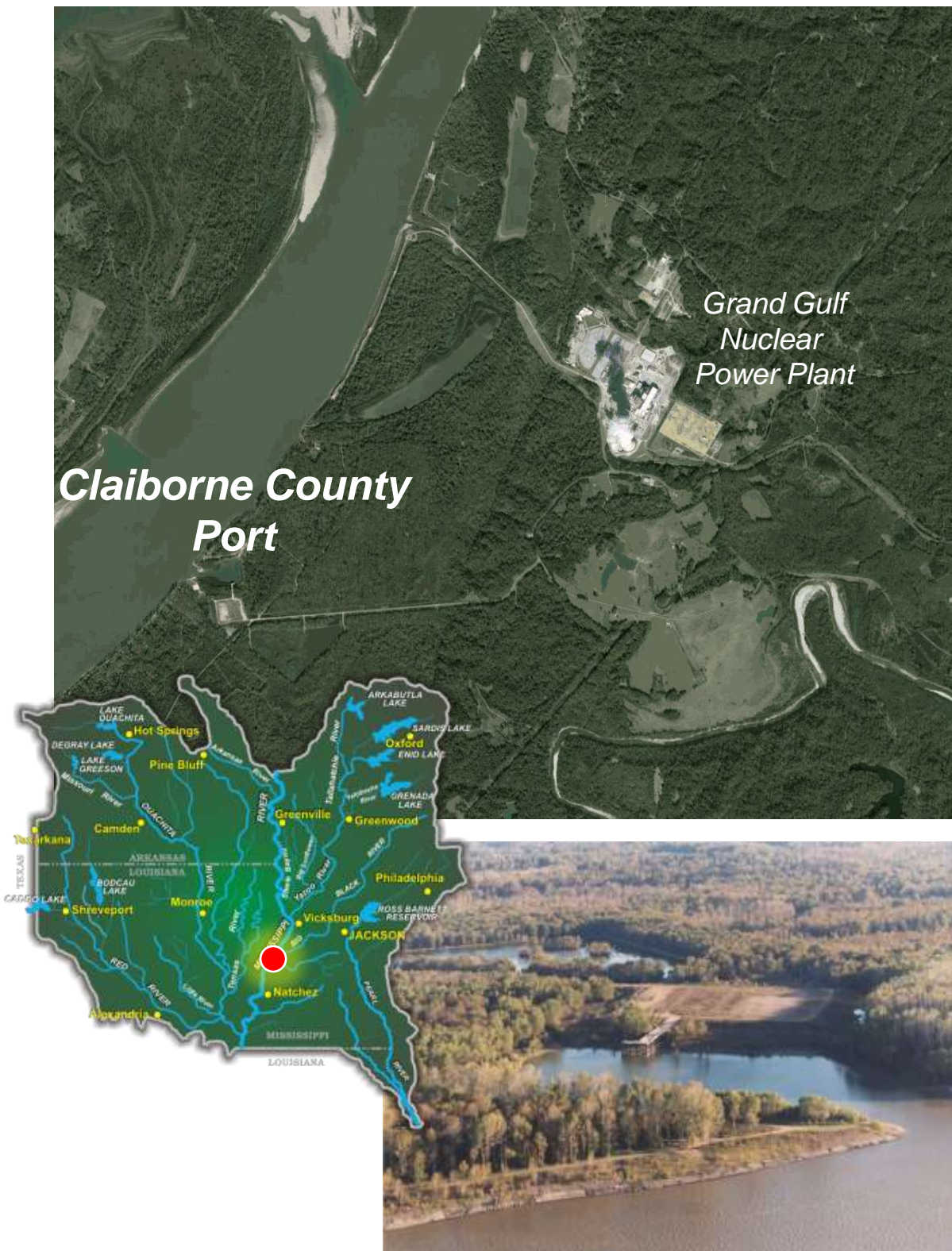
Acquisition Strategy: A contract will be awarded for harbor and port dredging.

Amount That Could Be Used in FY 15: Budgeted funds of \$9,000 will be used for surveys. Additional funds in the amount of \$1,583,000 could be used to fund maintenance dredging.

Project Sponsor/Customer: Rosedale-Bolivar County Port Commission

Congressional Interest: Senate: Cochran and Wicker; House: Thompson (MS-2).

Phase	FY 14 Allocation	FY 15 Budget	FY 15 Total Capability
O&M	\$1,200,000	\$9,000	\$1,592,000



Claiborne County Port, Mississippi



**US Army Corps
of Engineers**
Vicksburg District

Project Fact Sheet

Claiborne County Port, MS

River and Harbor Act of 1960, Section 107

Operation and Maintenance (NAV)

Location: Claiborne County Port, located in Claiborne County, MS, is a slack-water, shallow draft port located along the Mississippi River.

Description: The entrance channel is 800 feet long by 150 feet wide and maintained to a minimum depth of 9 feet. The turning basin is 800 feet by 400 feet and maintained to a minimum depth of 9 feet.

Issues: Depending on river stages, the port experiences low-water conditions starting in July and lasting through November of each year. Maintenance dredging allows this port to continue shipping during these stages.

Importance: The port provides a transportation need for water-oriented industries in Claiborne County, MS.

Risk: If dredging is not performed, this port will first begin to "light load" barges, in which barges will not be loaded to full capacity resulting in less efficient transportation. As the river continues to fall, there will not be enough water for the towboats to carry these barges to the river and the port will be required to close. Without maintenance dredging funds, this port will lose project dimensions during the busiest time of the year when crops are harvested and shipped.

Consequence: The loss of a dependable, reliable and safe port will have significant adverse impacts on the region due to the increased shipping costs by rail and trucks. Many small communities and farmers will be forced to seek other more costly means to move their products. Port employees along with the business located in the harbor would be laid off.



Claiborne County Port

Activities for FY 14: Funds are being used for surveys.

Acquisition Strategy: No contracts are scheduled to be awarded in FY 14.

Amount That Could Be Used in FY 15: Budgeted funds of \$1,000 will be used for surveys.

Project Sponsor/Customer: Claiborne County Port Commission

Congressional Interest: Senate: Wicker and Cochran;
House: Thompson (MS-2)

Phase	FY 14 Allocation	FY 15 Budget	FY 15 Total Capability
O&M	\$1,000	\$1,000	\$0



Pearl River, LA and MS



US Army Corps
of Engineers
Vicksburg District

Project Fact Sheet Pearl River, LA and MS

River and Harbor Act of 1935, as modified by River and Harbor Act of 1966

Operation and Maintenance (NAV)

Location: The Pearl River Navigation project is a navigation channel on the Pearl River that originally extended 58 miles from the mouth of the Pearl River to the mouth of Bogalusa Creek at Bogalusa, LA.

Description: The project consisted of three locks and three weirs that provided a channel with minimum depth of 7 feet and a minimum bottom width of 100 feet. The project was placed in a caretaker status in 1995 and has been maintained only for maintenance and safety needs.

Issues: The Pearl River Navigation project has exceeded its 50-year project life and has no commercial traffic. Efforts to reopen the waterway by the Vicksburg District in the mid-1980s to early 1990s by performing needed maintenance dredging were opposed by noncommercial groups. Maintenance dredging was last performed in 1988 and 1989. The last recorded barge movements occurred in 1991. In 1995, environmental litigation seeking declaratory and injunctive relief was filed, and the Corps was enjoined from dredging. In 1995, Congress officially placed the project in "caretaker" status by directing the limited project funds be used for maintenance of caretaker status. The project is in an unmanned caretaker status at this time. An Initial Appraisal Report was prepared recommending deauthorization of the project.

Importance: Funds have been requested for a New Start reconnaissance study directed at deauthorization and disposal of the project.

Risk: Recent engineering assessments completed for the lock facilities indicated that the sheet pile lock walls are rapidly corroding.

Consequence: Locks are deteriorating and are potentially unsafe.



Lock 3

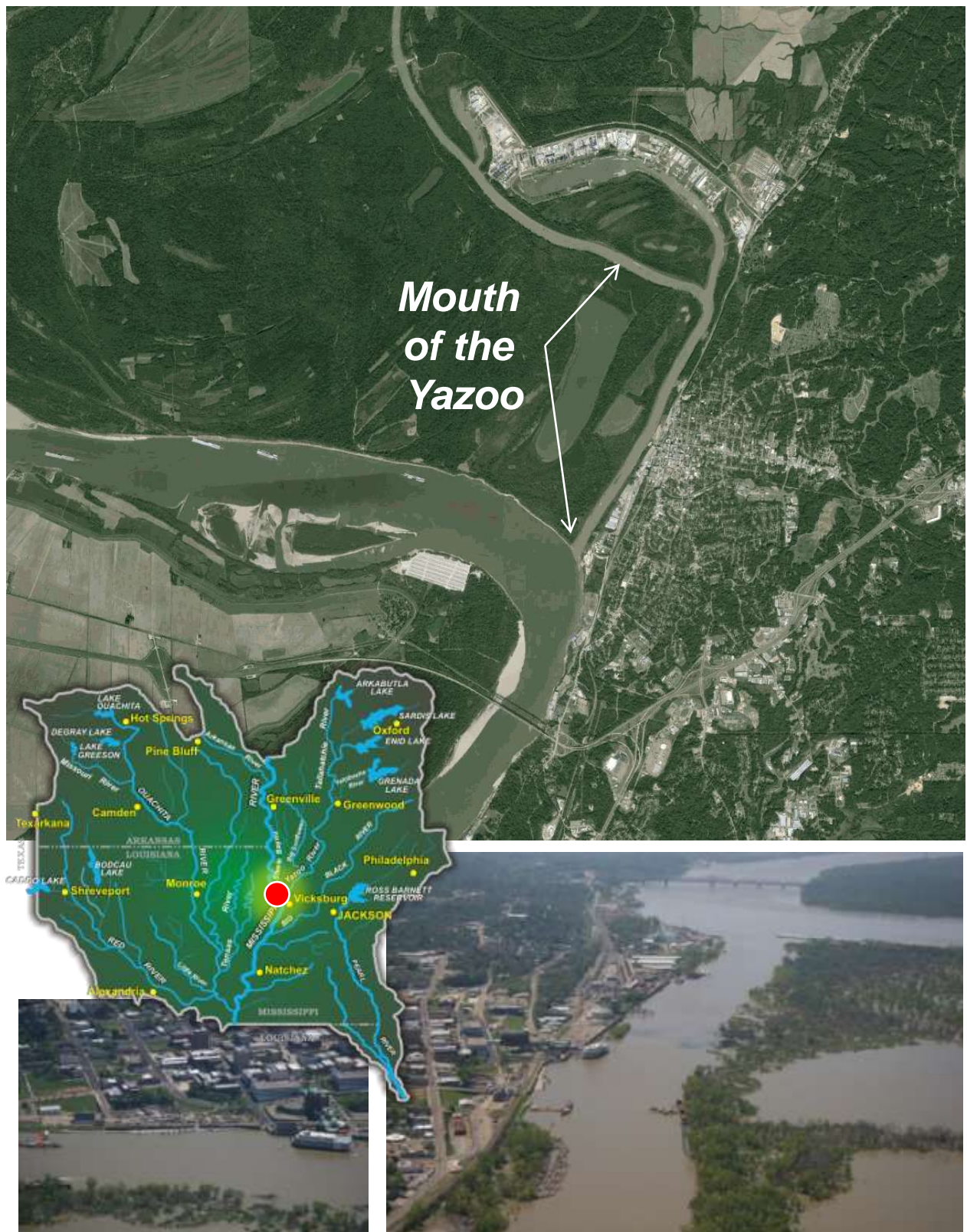
Activities for FY 14: Funds are being used to maintain the project in a caretaker status.

Acquisition Strategy: N/A

Amount That Could Be Used in FY 15: Budgeted funds of \$150,000 will be used to maintain project in a caretaker status. No additional capability exists for the project.

Congressional Interest: Senate: Landrieu and Vitter (LA); House: Palazzo (MS-4).

Phase	FY 14 Allocation	FY 15 Budget	FY 15 Total Capability
O&M	\$162,000	\$150,000	\$150,000



Mouth of the Yazoo, Mississippi



US Army Corps
of Engineers
Vicksburg District

Project Fact Sheet

Mouth of Yazoo River, MS

River and Harbor Act of 1960, Section 107

Operation and Maintenance (NAV)

Location: Mouth of Yazoo River starts at the Mississippi River and continues for 9.3 miles to the junction of Old Mississippi River and Yazoo River at Vicksburg, Mississippi.

Description: The channel is 150 feet wide, and a minimum operating depth of 9 feet below the lowest water of record is maintained in the channel.

Issues: Without maintenance dredging, this entrance channel will lose project dimensions requiring the Yazoo River and the Vicksburg Harbor to be shut down during the busiest time of the year when crops are harvested and shipped.

Importance: The project's purpose is to provide access to the Yazoo River, upper Vicksburg Harbor, and the Vicksburg Harbor.

Risk: Loss of project depths will have significant adverse impacts on the region due to increased shipping costs by rail and trucks. The Mat Sinking Unit and the dredge *Jadwin* anchor in the Vicksburg Harbor and their access to the Mississippi River during low-water stages could be impeded.

Consequence: There are 24 businesses and industries located in the harbors dependent on this project. Approximately 2,000 employees with payrolls over \$80 million could be affected if dredging is not performed. The economic impact to the area is approximately \$564.8 million.



Activities for FY 14: Funds will be used for maintenance dredging.

Acquisition Strategy: A contract will be awarded for harbor and port dredging.

Amount That Could Be Used in FY 15: Budgeted funds of \$34,000 will be used for surveys. Additional funds in the amount of \$1,048,000 could be used to fund maintenance dredging.

Project Sponsor/Customer: Vicksburg Port Commission

Congressional Interest: Senate: Cochran and Wicker; House: Thompson (MS-2).

Phase	FY 14 Allocation	FY 15 Budget	FY 15 Total Capability
O&M	\$175,000	\$34,000	\$1,082,000



US Army Corps
of Engineers
Vicksburg District

Project Fact Sheet Yazoo River, MS

Water Resources Development Act of 1986

Operation and Maintenance (NAV)

Location: The Yazoo River provides navigation from Mouth of the Yazoo River, Vicksburg, MS, to Greenwood, MS.

Description: Clearing and snagging of the channel provides a clear channel to Yazoo City, MS. The project depth of 9 feet is authorized but not dredged, to Greenwood, a distance of over 158 miles. All work is done at or near the Vicksburg Harbor just above the Mouth of the Yazoo River.

Issues: Without maintenance funds, the project would become hazardous to navigation due to log jams and snags.

Importance: The project meets a transportation need of water-oriented industry from Greenwood to Vicksburg.

Risk: The River services many small communities and farmers in the Mississippi Delta.

Consequence: Approximately 3,855 employees with payrolls over \$80 million could be affected if dredging is not performed. There are 24 businesses and industries located on the Mississippi River harbors.



Yazoo River

Activities and Current Status for FY 14: Funds are being used to for surveys.

Acquisition Strategy: None.

Amount That Could Be Used in FY 15: Budgeted funds of \$21,000 will be used to perform minimum channel clearing and snagging to maintain the authorized channel. Additional funds in the amount of 300,000 could be used to fully fund channel clearing and snagging to maintain the authorized channel at the confluence of the Yazoo River, Vicksburg Harbor and the Yazoo Canal (\$300).

Project Sponsor/Customer: Vicksburg Port

Congressional Interest: Senate: Cochran and Wicker (MS); House: Thompson (MS-2).

Phase	FY 14 Allocation	FY 15 Budget	FY 15 Total Capability
O&M	\$23,000	\$21,000	\$321,000



MR&T Investigations

MR&T Investigations

MR&T Investigations

The major objective of the MR&T Investigations program is to study projects that provide solutions to water resource problems for the area within the MR&T authorized project, generally from the area along the Mississippi River from Cairo, IL, to the Gulf of Mexico. The Corps undertakes studies in response to directives (authorizations) from Congress. Congressional authorizations are contained in public law and in resolutions of either the House Public Works and Transportation Committee or the Senate Environment and Public Works Committee.

Most studies are conducted in two phases - reconnaissance and feasibility. The reconnaissance phase is to define the problem, opportunities, and identifying potential solutions. It also determines whether or not planning should proceed into the feasibility phase based on a preliminary appraisal of the Federal interest, cost, benefits, and environmental impacts of the identified potential solution. The phase is completed upon the signing of the Feasibility Cost-Sharing Agreement (FCSA) by the Corps and a project sponsor.

The feasibility phase can take up to 3 years to complete and is cost shared equally between the Federal Government and the non-Federal sponsor. The report results in recommendations to Congress for or against Federal participation in solutions to the water resource problem and opportunities identified in the study. A recommendation for Federal participation identifies a recommended plan/project, generally for construction authorization and funding.

The Preconstruction, Engineering and Design Studies (PED) phase of project development encompasses all planning and engineering necessary for project construction, after release of the report and Division Engineer's public notice on a favorable study. Preparation of design memorandums and plans and specifications will be cost shared in accordance with the cost sharing required for project construction.

Mississippi River and Tributaries Project Area



Collection and Study of Basic Data,
Arkansas, Louisiana, and Mississippi



**US Army Corps
of Engineers**
Vicksburg District

Project Fact Sheet

Collection and Study of Basic Data, AR, LA, MS

Flood Control Acts of 1928, Sections 1, 2, 3, and 10

Mississippi River and Tributaries, Investigations (FRM)

Location: The Collection and Study of Basic Data project is located throughout the Vicksburg District in AR, LA, and MS.

Description: Data collected consist of information on stream flow, sediments and nutrients, rainfall, floods, water quality, aquatic resource monitoring and other items of related hydrologic nature.

Issues: Data collected under this activity are for authorized flood control projects for which funds have been appropriated in the Memphis, Vicksburg, and New Orleans Districts. Data are used by numerous agencies and the public to determine when flooding will occur and to plan for any evacuations. In addition, the Environmental Protection Agency and state environmental quality agencies are now recognizing water quality as a critical element in environmental protection planning and construction. Aquatic resources are a good indication of the water quality of a particular stream. These data are vital to show projects are in conformance with state and Federal laws.

Importance: Data collection is essential in the planning, design, construction, and O&M of authorized flood control projects, especially significant after the Flood of 2011. The hydraulic and hydrologic data are being reviewed for how the MR&T system performed during the 2011 flood, evaluate any needed changes in the water management of the system, and identify areas/reaches in which the current 1976 Refined Project Flood Flowline may need revision.

Risk: Without adequate funding, the District would lose the ability to make accurate flood predictions and to determine whether the project flowline is correct to provide Project Design Flood protection to the Valley as directed by Congress. Sediment and Geomorphic Studies must continue due to changes observed during the 2011 Flood.

Consequence: If not funded, essential hydraulic and hydrologic and water quality data would not be collected and therefore data would not be available to accurately predict future flood and drought conditions on major rivers within the District.



Activities for FY 14: Funds are being used to collect essential basic data used in planning and design of authorized flood control projects. Funds are also being used for aquatic and water quality monitoring; Conduct regional review of numerous H&H, flowline, sedimentation and geomorphic related issues and/or concerns that were discovered during the 2011 flood.

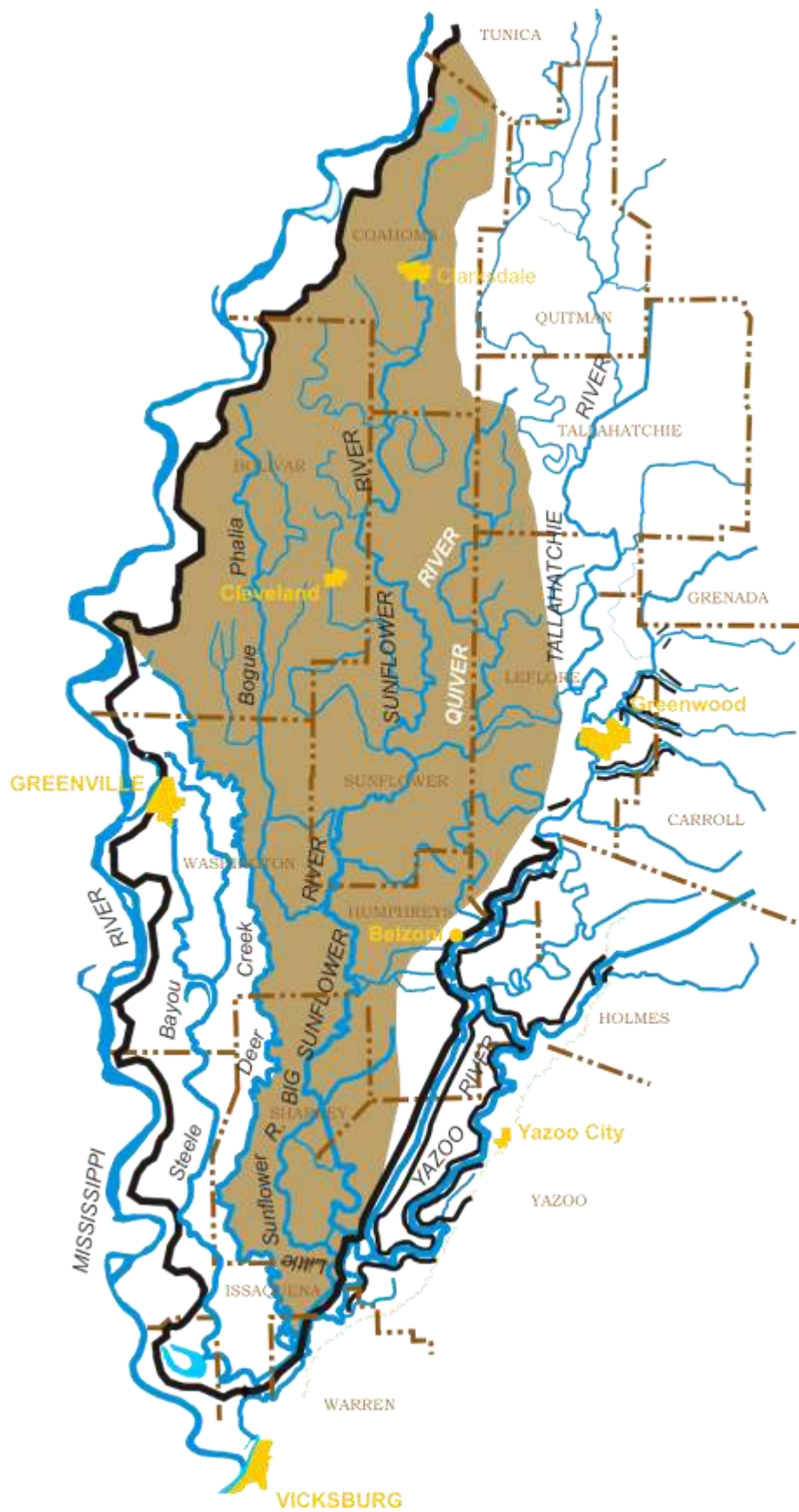
Acquisition Strategy: No contracts are scheduled to be awarded in FY 14.

Amount That Could Be Used in FY 15: Budget funds of \$9,280,000 will utilized to continue the Regional flowline (\$4,000,000) and sedimentation and geomorphic studies (\$5,000,000), and collect basic stream flow data (\$280,000). Additional funds of \$3,400,000 could be utilized for stream flow data (\$200,000) water quality and aquatic monitoring (\$1,200,000), flowline study (\$1,000,000), and sedimentation and geomorphic assessments (\$1,000,000).

Project Sponsor/Customer: Mississippi Levee Board

Congressional Interest: Senate: Boozman and Pryor (AR), Landrieu and Vitter (LA), Cochran and Wicker (MS); House: Crawford (AR-1), Cotton (AR-4), Scalise (LA-1), Fleming (LA-4), McAllister (LA-5), Nunnelee (MS-1), and Thompson (MS-2).

Phase	Estimated Federal Cost of Phase	FY 14 Allocation	FY 15 Budget	FY 15 Total Capability
Feasibility	N/A	\$8,370,000	\$9,280,000	\$12,680,000



**Big Sunflower River Watershed Study, MS
(Quiver River)**



US Army Corps
of Engineers
Vicksburg District

Project Fact Sheet Big Sunflower River Watershed Study, MS (Quiver River)

SR, 29 June 1973

Mississippi River and Tributaries, Investigations (FRM)

Location: The study area is part of the Big Sunflower River and Yazoo River Watersheds, in the Mississippi Delta.

Description: The Quiver River originates in Tallahatchie County and meanders more than 60 miles south before its confluence with the Big Sunflower River, just north of U.S. Highway 82 in Sunflower County. Major streams in the study area include the Tallahatchie River, Quiver River, Sandy Bayou, Black Bayou, and Parks Bayou. The predominant emphasis of the study is the restoration of the degraded aquatic ecosystems in the study area.

Issues: This Mississippi River Delta has lost over 80% of its bottomland hardwood wetlands and riverine systems have been severely degraded as a result of our anthropogenic process. The Quiver River system was historically a part of an interconnected watershed providing unity throughout the basin. Beginning in early 1950's channelization and channel realignments for the purposes of flood control and water supply highly degraded the natural system into its current state. The streams in the area are prone to extremely low-water levels and little or no flow during drought and low-water periods.

Importance: The project offers unique opportunities for making improvements to aquatic, riparian, and terrestrial resources in the region by restoring the natural hydrologic flow through inter-basin transfer. The overall health of the streams is viewed by the public as having a substantial impact on the wetland, aquatic, and terrestrial ecosystems in the vicinity. There is an opportunity to restore populations of American eel, paddle fish, and blue sucker, all of which utilize the Quiver River and are listed as vulnerable by the American Fisheries Society. Additionally, there are 44 species of freshwater mussels in the Yazoo Basin with 28 species identified from the Quiver River. Of the 44 species documented in the Yazoo Basin, 7 are listed as special concern, threatened, or endangered. Of those 7, the pyramid pigtoe mussel is documented specifically in the Quiver River and given the number of listed mussels in the Yazoo Basin, flow augmentation in the Quiver River has the potential of benefitting numerous species of regional and national importance.



Degraded stream conditions in the Big Sunflower Watershed

Risk: Poor water quality directly affects the ecosystem's ability to support aquatic habitat, including numerous vulnerable, special concern, or endangered species. Decreased food supplies and poor water quality could adversely impact other wildlife as well.

Consequence: Degradation of the environment and aquatic habitat will continue without properly established solutions.

Activities for FY 14: Funds are being used to continue the feasibility study.

Acquisition Strategy: No contracts are scheduled to be awarded in FY 14.

Amount That Could Be Used in FY 15: Carryover funds will be used to complete the study.

Project Sponsor/Customer: Yazoo-Mississippi Delta (YMD) Joint Water Management District

Congressional Interest: Senate: Cochran and Wicker (MS); House: Thompson (MS-2).

Phase	Estimated Federal Cost of Phase	Federal Funding Thru FY 13	FY 14 Allocation	FY 15 Budget	FY 15 Total Capability
Feasibility	\$1,315,000	\$745,000	\$570,000	\$0	\$0



MR&T Construction



MR&T Construction

MR&T Construction

The objective of the MR&T construction program is to construct and complete authorized and appropriated MR&T projects as economically and quickly as practicable within program constraints and consistent with current national priorities.



Mississippi River Levees, AR, LA, and MS



**US Army Corps
of Engineers**
Vicksburg District

Flood Control Acts of 1928, 1936, 1941, 1944, 1946, 1950, 1954, 1962, 1965, 1968, River Basin Monetary Authorization Act of 1971, WRDA 1992, Sec 103, WRDA 2000, Section 508

Project Fact Sheet

Mississippi River Levees, AR, LA & MS

Mississippi River and Tributaries, Construction (FRM)

Location: The Mississippi River levee system on the west bank extends from Allenville, Missouri, on the Little River Diversion Channel generally southward to Venice, Louisiana, and on the east bank from Hickman, Kentucky, to opposite Venice, Louisiana, except where interrupted by hills and tributary streams. Included in the system are the levees, which protect Mounds, Mound City and Cairo, Illinois, and the New Madrid Levee and Floodway.

Description: Improvement provides for raising, strengthening, and in some cases, extending existing levees to provide protection against the project design flood.

Issues: There are currently 110 miles remaining of deficient levees within the Vicksburg District.

Importance: The Mississippi River Levees are designed to protect people, property, infrastructure, and the environment in the alluvial valley against the project design flood by confining flow to the channel between the levees and natural hill lines, except where it enters natural backwater areas or is diverted purposely into floodway areas.

Risk: Catastrophic damage is likely to occur if the system is below authorized level of protection.

Consequence: A breach in the levee could result in over 1 million acres inundated, towns and cities flooded, and lives lost. Commercial impacts include roads, agricultural and timber production. Farmland is at risk of flooding, resulting in devastation of primary economic engine of the region. Environmental losses of terrestrial habitat and wildlife would be significant.

Activities for FY 14:

Funds are being used award Item 377R, Waterproof-Upper Lake, Concordia, LA (\$7,500,000); for relocation of utilities; engineering and design of future items of construction; and to continue construction on Items 422R, Reid Bedford-King, LA; 420R, Bayou Vidal to Elk Ridge, LA; 509L, Lake Jackson-Palmetto, MS; and 463L, Magna

Vista-Brunswick, MS. Item 420-R Bayou Vidal – Elkridge (Levee Enlargement and Seepage Control).



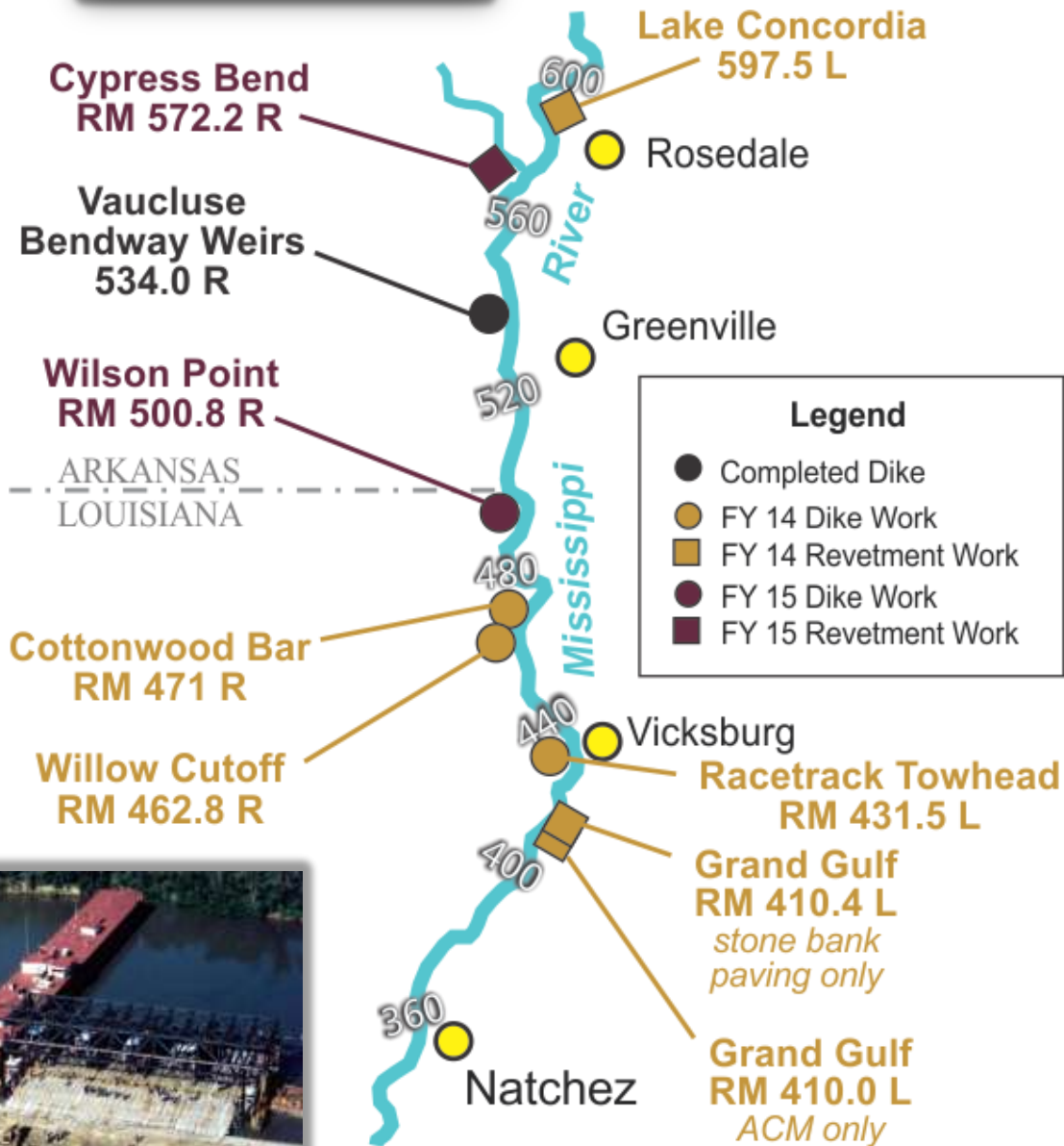
Acquisition Strategy: Item 377R will be awarded in 2014.

Amount That Could Be Used in FY 15: Budgeted funds of \$12,155,000 will be used for relocation of utilities, engineering and design of future items of construction. Additional funds in the amount of \$23,500,000 could be used to construct Waterproof-Upper Lake Concordia, LA, Item 374-R (\$10,000.0) Magna Vista-Brunswick, MS, Item 465-L (\$8,000.0), Lake Jackson to Palmetto, Item 511L (\$4,000.0) and Willow Pt Youngs Pt, LA Item 457R (\$1,500.0).

Project Sponsor/Customer: Mississippi Levee Board, Fifth Louisiana Levee Board, and Southeast Arkansas Levee District.

Congressional Interest: Senate: Boozman and Pryor (AR), Landrieu and Vitter (LA), Cochran and Wicker (MS); House: Crawford (AR-1), Cotton (AR-4), Scalise (LA-01), McAllister (LA-5), Thompson (MS-2).

Phase	Estimated Federal Cost of Phase	Federal Funding Thru FY13	FY 14 Allocation	FY 15 Budget	FY 15 Total Capability
Construction	\$1,067,100,000	\$728,891,100	\$13,455,000	\$12,155,000	\$35,655,000



Mississippi River Channel Improvement, Arkansas, Louisiana, and Mississippi



**US Army Corps
of Engineers**
Vicksburg District

Mississippi River Channel Improvement, AR, LA, & MS

Flood Control Acts of 1928 (Section 1); 1936 (Section 1); 1938 (Section 4); 1941 (Section 3); 1944 (Section 10); 1962 (Section 203); 1965 (Section 201, 204); 1966 (Section 202, 203); and 1970 (Section 207)

Mississippi River and Tributaries, Construction (FRM, NAV)

Location: The project is located in the Mississippi River and along its banks from the vicinity of Cessions Towhead at River Mile 616 AHP, to Union Point at River Mile 326 AHP, a distance of approximately 290 miles.

Description: The plan of improvement consists of stabilization of the Mississippi River main channel in a desirable alignment for purposes of flood control and navigation by means of revetments, river training structures (dikes, chevrons, and bendway weirs), and improvement dredging.

Issues: The Lower Mississippi River experienced the flood of record at many locations during 2011. Many channel improvement features including both revetments and dikes were damaged.

Importance: River training structures improve navigation conditions, stabilize bends, and reduce maintenance dredging requirements. Revetment construction maintains channel alignment and protects the banks from erosion.

Risk: Catastrophic damage to the navigation channel, river banks, and adjacent mainline levee is likely to occur if the system is not constructed as authorized.

Consequence: Failure to adequately fund will result in channel deterioration which would adversely impact the navigation industry in economically and efficiently transporting commodities on the Mississippi River. Continued erosion of banks and/or failure of revetments would adversely impact channel alignment and threaten the integrity of the mainline levee system.



Stone Dike Construction



Revetment Construction – Articulated Concrete Mat (ACM)

Activities for FY 14: Funds are being used for dike construction at Cottonwood Bar, LA, Willow Cutoff, LA, and Racetrack Towhead, MS, and for revetment construction at Lake Concordia, MS, and Grand Gulf, MS. Funds are also being used to fund stone bank paving associated with revetment construction.

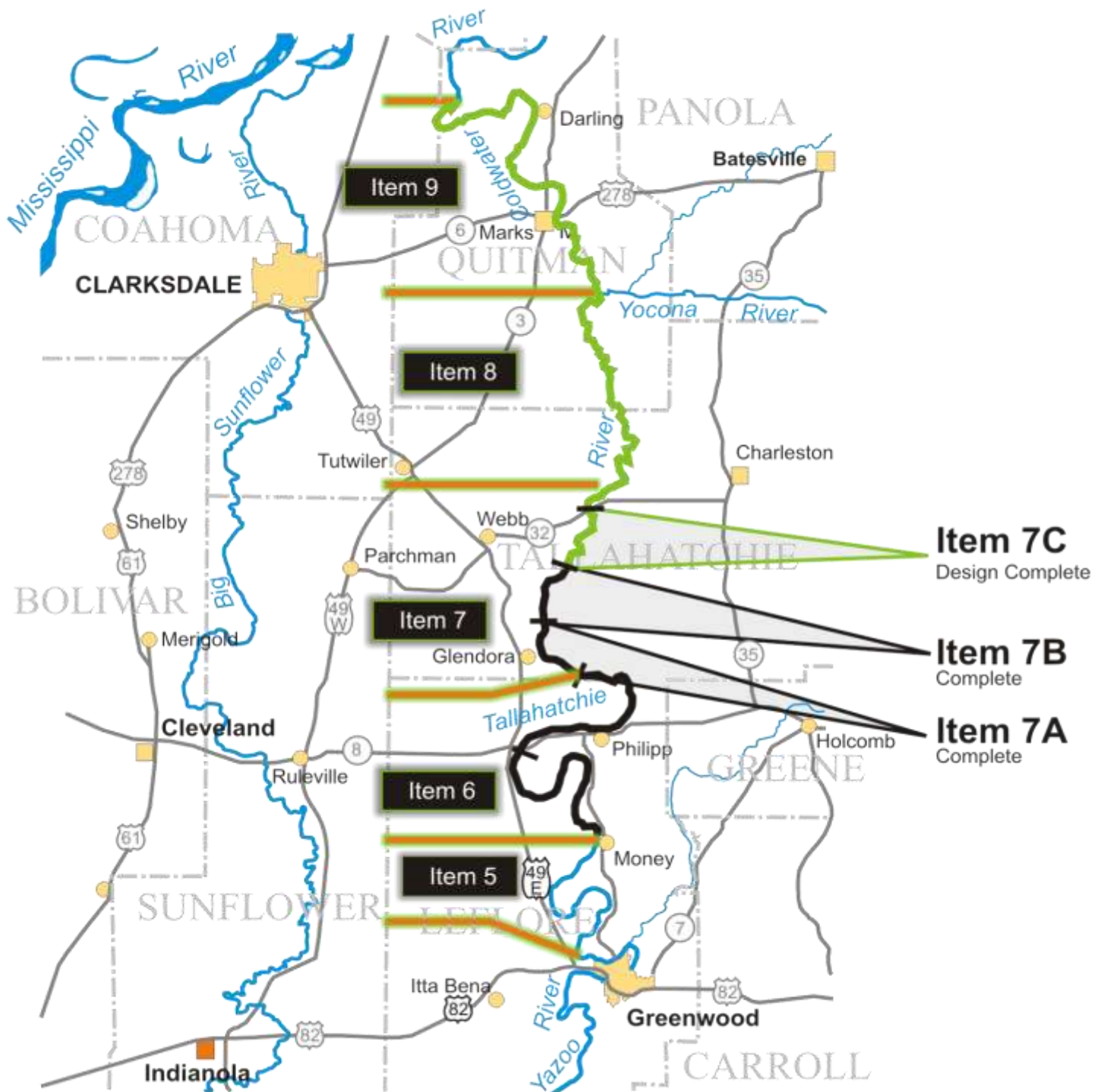
Acquisition Strategy: Three contracts have been awarded in FY 14, Cottonwood Bar, Willow Cutoff and Racetrack Towhead dikes and Stone Bank Paving.

Amount That Could Be Used in FY 15: Budgeted funds of \$16,600,000 will be used to fund continued design and construction management of dikes, stone bank paving, and continued design and construction of revetments. Additional funds in the amount of \$14,900,000 could be used to fully fund dike construction at Wilson Point, LA (\$5,400.0); Ben Lomand, MS (\$6,100.0); and Anconia Chute, AR (\$3,400.0).

Project Sponsor/Customer: Navigation industry, environmental community, and Mississippi Levee, 5th Louisiana Levee, and Southeast Arkansas Levee Boards.

Congressional Interest: Senate: Boozman and Pryor (AR), Landrieu and Vitter (LA), Cochran and Wicker (MS); House: Crawford (AR-1), Cotton (AR-4), McAllister (LA-5), Thompson (MS-2), and Harper (MS-3).

Phase	Estimated Federal Cost of Phase	Federal Funding Thru FY 13	FY 14 Allocation	FY 15 Budget	FY 15 Total Capability
Construction	\$1,245,000,000	\$987,895,000	\$35,563,000	\$16,600,000	31,500,000



Upper Yazoo Projects (UYP), MS



US Army Corps
of Engineers
Vicksburg District

Project Fact Sheet

Yazoo Basin, Upper Yazoo Projects, MS

Flood Control Acts of 1936, Sec. 4 and 8a; 1941, Sec. 3b and 3g; 1946, Sec. 3, 10f, and 10g; and 1965, Sec. 2045

Mississippi River and Tributaries, Construction (FRM)

Location: The Upper Yazoo Projects (UYP) includes channel and levee features along the main channel of the Yazoo, Tallahatchie, and Coldwater Rivers from the vicinity of Yazoo City, MS, to the vicinity of the confluence of Arkabutla Creek with the Coldwater River.

Description: The project provides much needed flood risk reduction for this region by decreasing flood stages up to 3 feet in most areas. The project began in 1976 near Yazoo City and had advanced to near Sidon, MS before the project was reformulated in 1994. Reformulation resulted in approximately 130.3 miles of channel enlargement in nine segments from Sidon to Darling, MS. The project focuses on cleaning out and restoring channel capacity to the Yazoo River and its tributaries. Before initiating construction on the UYP, about 1.1 million acres were subject to the 100-year flood. Damages totaled more than \$18,600,000 annually, including \$3,000,000 in urban damages and 700,000 acres of agricultural land subject to inundation. To date, 12,400 acres of mitigation lands have been acquired. A total of 16,250 acres of mitigation land is required for this project.

Issues: Absence of funding will delay remaining flood control and economic benefits to the area by not allowing the initiation of any new construction items. Currently there are 29,000 people protected in the 100-year flood plain.

Importance: The project provides flood protection for 8,900 square miles in this region through reduction of flood stages up to 3 feet in most areas. Approximately 26 million cubic yards of material will be excavated at the project's completion providing an average conveyance increase of approximately 50 percent over current channel capacity. Existing flooding damages would be reduced by 55 percent.

Risk: Impacts include loss of life, isolation of homes and numerous rural communities and months of flooding.

Consequence: Commercial impacts include roads, agricultural and timber production. Farmland is at risk of flooding, resulting in devastation of the primary economic engine of the region. Environmental losses of terrestrial habitat and wildlife would be significant.



Construction along the bank of the Tallahatchie River
Item 6B near Phillip, MS

Activities for FY 14: None.

Acquisition Strategy: No contracts are scheduled to be awarded in FY 14.

Amount That Could Be Used in FY 15: Funds in the amount of \$21,000,000 could be used for design and purchase real estate for items 7C-1 & 7C-2 (\$1,750.0), construction of 7C-1 & 7C-2 (\$13,000.0), install flowmeters on wells at mitigation lands (\$250.0), and construction of Lamb-Fish Bridge bypass channel (\$6,000.0).

Project Sponsor/Customer: The Yazoo-Mississippi Delta Levee Board

Congressional Interest: Senate: Cochran and Wicker (MS); House: Thompson (MS-2).


Phase	Estimated Federal Cost of Phase	Federal Funding Thru FY 13	FY 14 Allocation	FY 15 Budget	FY 15 Total Capability
Construction	\$445,000,000	\$297,266,000	\$0	\$0	\$21,100,000

Area of
Enlarged
Map

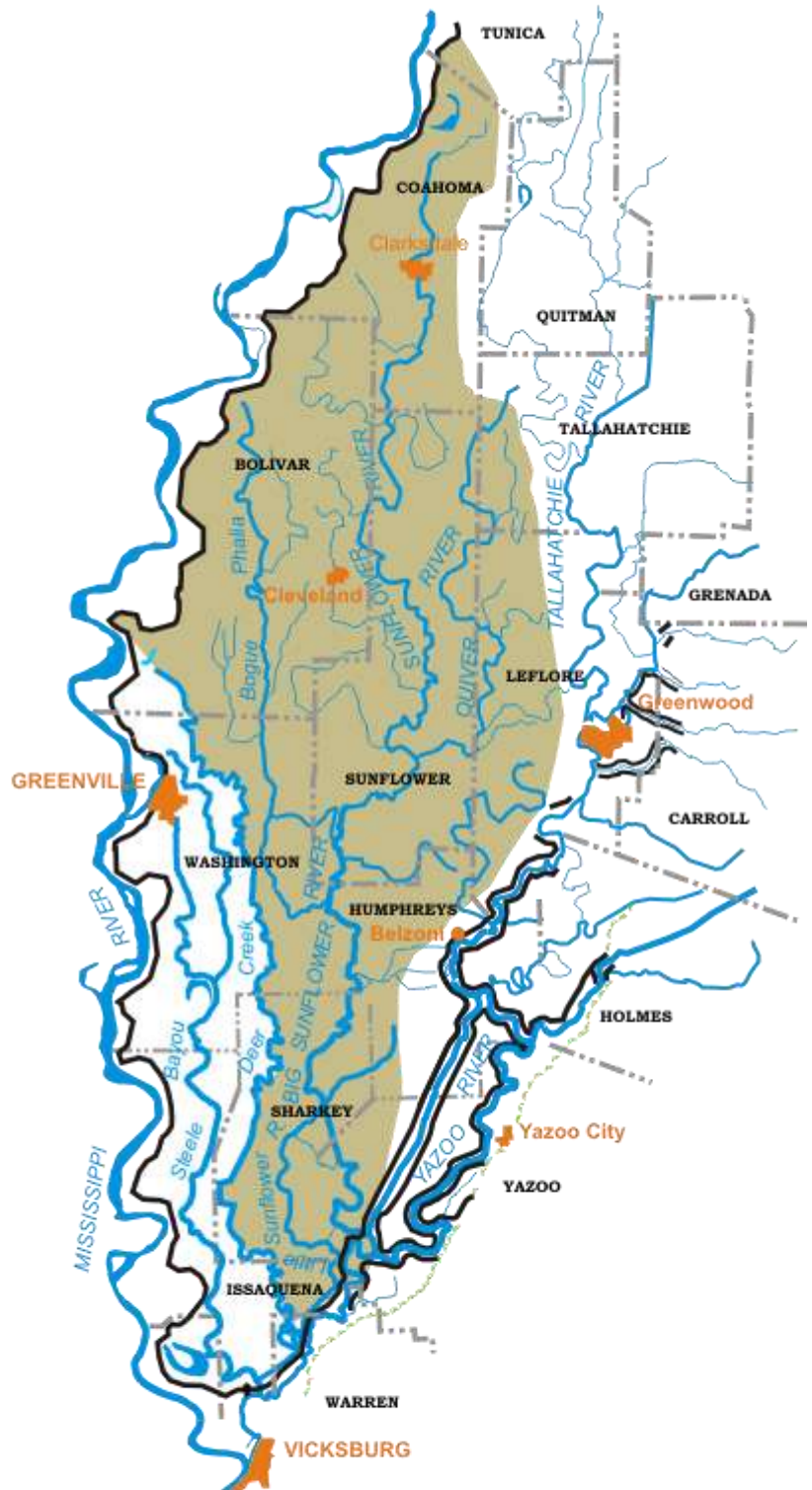


MISSISSIPPI

Legend

 Drainage
Basin

 Levee



Yazoo Basin,
Big Sunflower River



US Army Corps
of Engineers
Vicksburg District

Project Fact Sheet

Yazoo Basin, Big Sunflower River, MS

Flood Control Act of 1944, 1950, 1962 and 1965

Mississippi River and Tributaries, Construction (FRM)

Location: The Steele Bayou Basin lies within the Delta region of west-central Mississippi. Its 752-square-mile drainage area runs from north of Greenville to its confluence with the Yazoo River just north of Vicksburg.

Description: The project consists of 739 miles of channel, 9 miles of levees and will protect 195,000 acres against the design flood. An additional 395,000 acres will be benefited because of improved drainage conditions. The project will provide flood protection and environmental enhancements for this region.

Issues: The Environmental Protection Agency and Mississippi Department of Environmental Quality have recognized in recent years the impacts of sediment and nutrients on environmental resources in the Big Sunflower River Basin. The installation of sediment structures will improve the water quality in the basin.

Importance: Between the years 1990-2009 the sediment reduction structures have reduced approximately 686,000 tons of sediment that would have naturally been deposited in delta streams. Keeping sediment out of the streams improves channel flow capacity during times of flooding and reduces dredging frequency.

These structures also benefit the environment by keeping agricultural fertilizers and pesticides out of the streams, thereby contributing to another one of the Corps major missions of ecosystem restoration. The monitoring of water quality over a number of years will allow documentation of these long-term benefits and the development of Total Maximum Daily Load targets.

Risk: Impacts could include increased sediment and nutrient loads. Diminished channel capacity would increase the frequency, duration, and effects of flooding in this area.

Consequence: Without additional funding, all work will be suspended. No further monitoring and documentation of

long-term benefits will occur and work addressing sedimentation and erosion control will come to a halt.



Sediment Reduction Structure

Activities for FY 14: Funds will be used to continue design for sediment reduction structures.

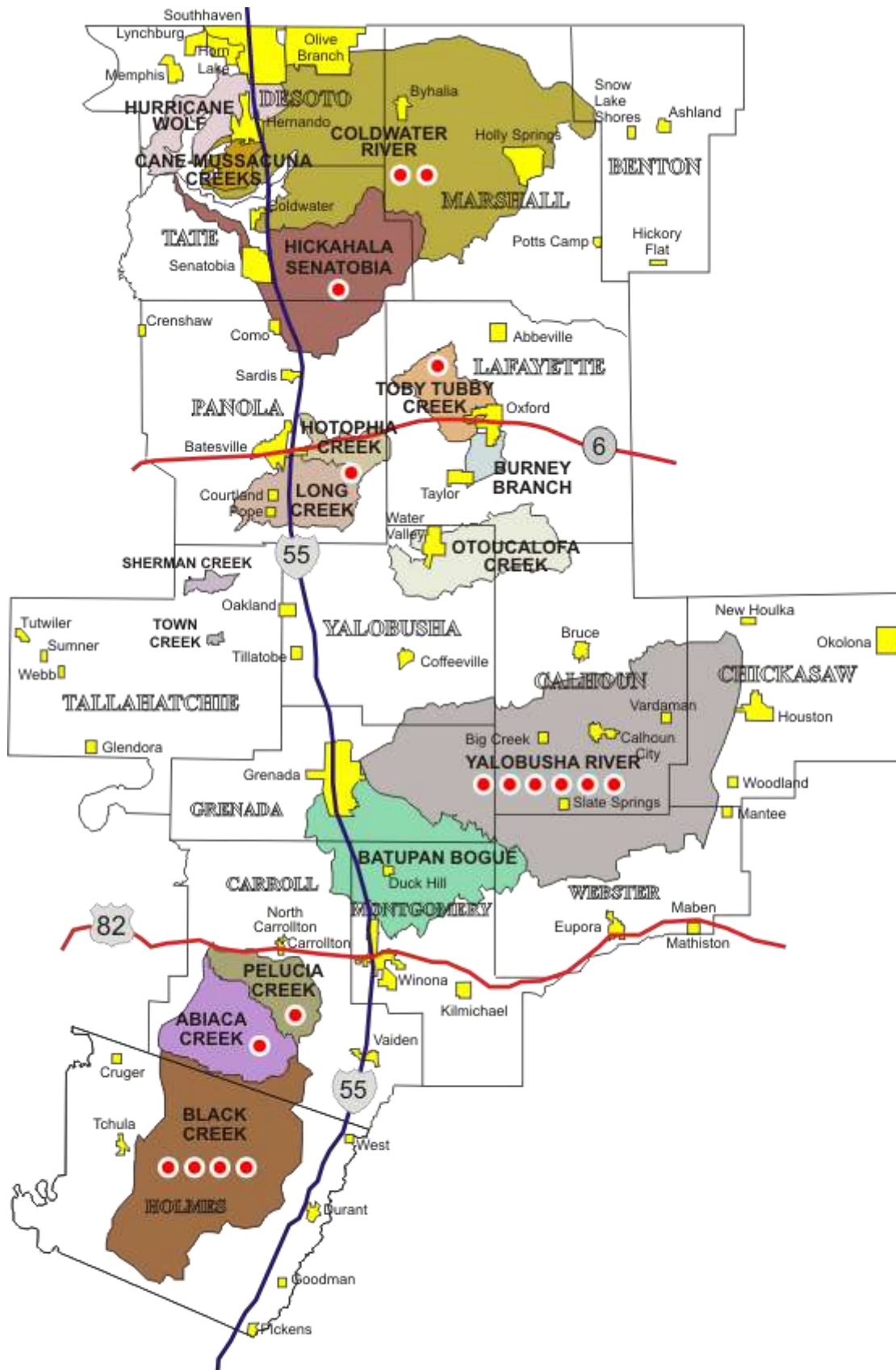
Acquisition Strategy: No contracts are scheduled to be awarded in FY 14

Amount That Could Be Used in FY 15: Funds in the amount of \$3,500,000 could be used to award three Sediment Reduction Structures items.

Project Sponsor/Customer: Yazoo-Mississippi Delta Levee Board

Congressional Interest: Senate: Cochran and Wicker (MS); House: Thompson (MS-2).

Phase	Estimated Federal Cost of Phase	Federal Funding Thru FY 13	FY 14 Allocation	FY 15 Budget	FY 15 Total Capability
Construction	\$134,300,000	\$128,539,000	\$800,000	\$0	\$3,500,000



**Yazoo Basin,
Mississippi Delta Headwaters Project**



US Army Corps
of Engineers
Vicksburg District

Project Fact Sheet

Yazoo Basin, Delta Headwaters Project

Emergency Jobs Appropriations Act of 1982; WRDA 1986, Section 103e

Mississippi River and Tributaries, Construction (FRM)

Location: The project is located in the eastern (hill) section of the Yazoo River Basin, MS.

Description: The project consists of 16 watersheds, ranging in size from 1 square mile (Town Creek) to over 600 square miles (Coldwater River), with features that include bank stabilization, grade control structures, floodwater-retarding structures, and channel modifications for flood damage reduction, bank stabilization and sedimentation/erosion control.

Issues: The program is vital to the ongoing erosion prevention in the 16 authorized watersheds. By completing the needed work, the Vicksburg District will reduce the risk of flooding in the Yazoo Basin. This will also reduce the sediment deposited in downstream reservoirs and streams, reduce the need for maintenance dredging, and improve degradation of wildlife habitat in and along the streams.

Importance: The project provides important flood control, environmental, water quality, and sediment reduction benefits, in addition to economic stimulus benefits to the basin. It is the only program of its kind in the Mississippi River Valley and has proven to be a valuable model that can be used throughout the entire Mississippi River Valley.

Erosion from agricultural land frequently carries agricultural chemicals and fertilizers adding to the Gulf Hypoxia. Consequently, reducing erosion improves water quality. Once stabilized, stream systems provide improved wildlife habitat both in and along the streams.

Risk: The program is not within the Administration's policy; therefore, no long-term program planning can occur. There is no authority to maintain structures that are currently providing services for landowners, towns, and counties in the Yazoo River Basin.

Consequence: Without funding, all work will be suspended, resulting in no further work to stop sedimentation, control erosion, or improve water quality. Land will continue to erode, towns and farms will continue to flood, and existing structures will fall into disrepair.



Yazoo Basin, MS
Mississippi Delta
Headwaters Project

Activities for FY 14: Funds are being used to complete design on and award two riser pipe contracts, and construction management.

Acquisition Strategy: Two construction contracts are scheduled to be awarded in FY14.

Additional Amount That Could Be Used in FY 15: Funds in the amount of \$7,000,000 could be used to fully fund a bank stabilization contract (\$1,750,000) and two riser pipe contracts (\$3,000,000); planning, engineering and design, real estate efforts, construction management, and monitoring of project features (\$1,000,000); complete FWRSS3 (\$1,000,000) and for monitoring of erosion and ongoing flood control in Coldwater, Hickahala, Senatobia and Hurricane-Wolfe Watersheds (\$250,000).

Project Sponsor/Customer: Multiple

Congressional Interest: Senate: Cochran and Wicker (MS); House: Thompson (MS-2).

Phase	Estimated Federal Cost of Phase	Federal Funding Thru FY 13	FY 14 Allocation	FY 15 Budget	FY 15 Total Capability
Construction	\$438,022,000	\$438,022,000	\$2,830,000	\$0	\$7,000,000



**Yazoo Basin,
Yazoo Backwater Area (less Rock Bayou)**



US Army Corps
of Engineers
Vicksburg District

Project Fact Sheet

Yazoo Basin, Yazoo Backwater Less Rocky Bayou, MS

Flood Control Acts of 1941 and 1944

Mississippi River and Tributaries, Construction (FRM)

Location: The Yazoo Backwater Project lies in the southern part of the Delta in west-central Mississippi. It extends from just north of Vicksburg approximately 60 miles to the vicinity of Hollandale and Belzoni, MS

Description: The Yazoo Backwater Project is situated between the mainline Mississippi River levee and the escarpment which forms the eastern boundary of the Delta and is subject to backwater flooding from the Mississippi River. It comprises about 2,000 square miles. Four greentree reservoirs and associated pump stations were constructed by the Corps of Engineers for the Yazoo Backwater mitigation. In addition, 8,800 acres of agricultural lands were purchased and reforested to offset terrestrial environmental losses from the construction of the Yazoo Backwater and Satartia area levees, completed in 1978.

The 8,800 acres were purchased in 1990 and reforestation was completed in 1997. The U.S. Fish and Wildlife Service disagreed with the Vicksburg District's mitigation analysis because it didn't include the time lag between construction completion (1978) and mitigation implementation (1990). The Service's position was that the losses were continuing between 1978 and 1990, and therefore more mitigation was required. The Vicksburg District concurred with the Service and incorporated an updated mitigation analysis in the 2007 Yazoo Backwater Area Reformulation Report and EIS. The Yazoo Backwater Area Reformulated project was not implemented and there still remains an unfulfilled mitigation requirement for the project.

Issues: No funds for acquisition and development of mitigation features. An additional acquisition of 4,000 acres is needed to fulfill the terrestrial mitigation requirements for the Yazoo Backwater and Satartia Area Levees.

Importance: Yazoo Backwater mitigation features are needed to fulfill project commitments to offset unavoidable environmental losses.



Waterfowl - Yazoo Backwater Area

Risk: The environmental losses will continue to occur unless they are mitigated. By not purchasing the additional mitigation lands now, the amount required to fully offset the environmental losses increases every year.

Consequence: There is a net loss of ecological value to the nation as a result of this project, which is not consistent with current policy law and guidance.

Activities for FY 14: Funds are being used to update project mitigation analysis (\$50,000) and acquisition and development of mitigation features (\$350,000).

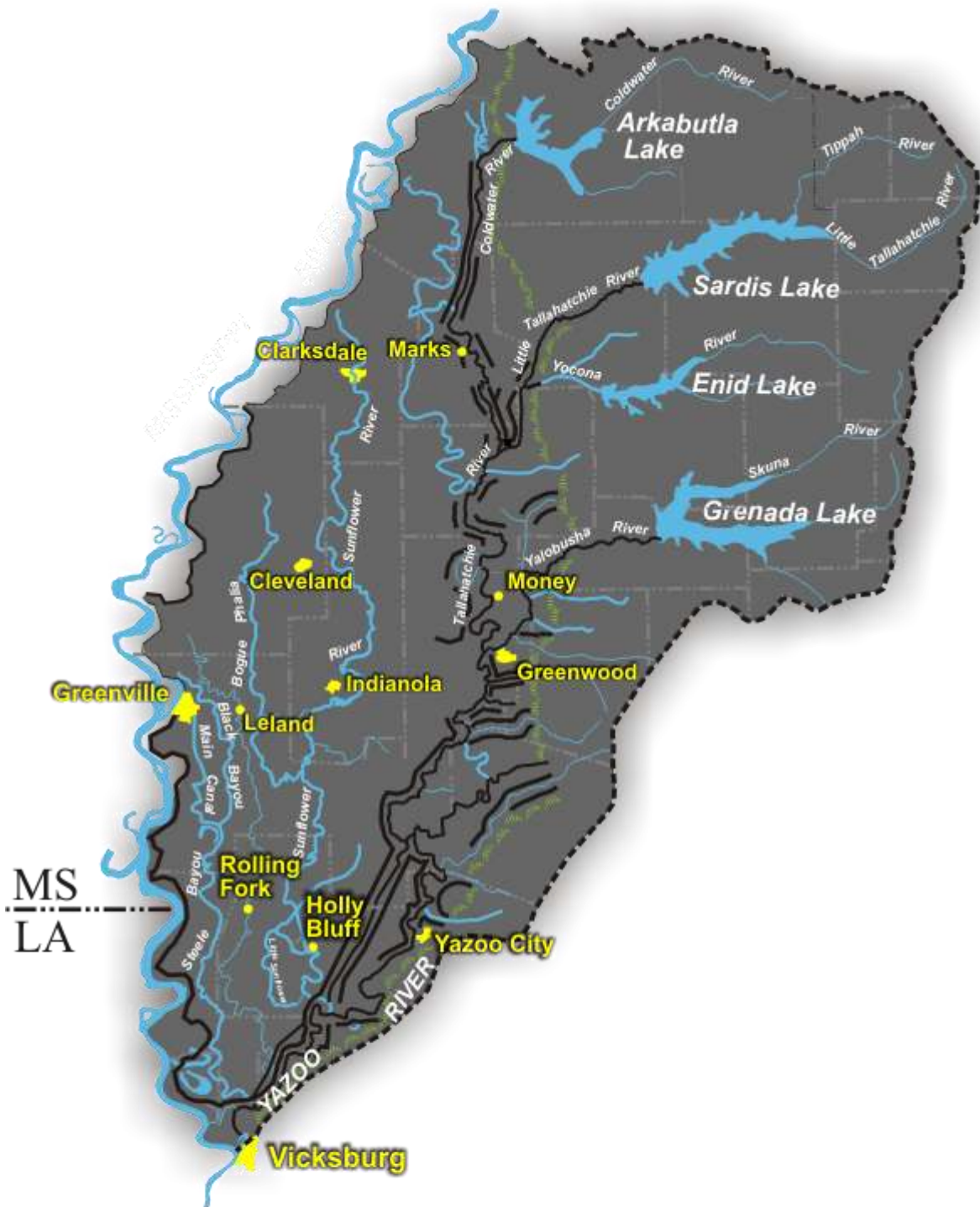
Acquisition Strategy: No contracts are scheduled to be awarded in FY 14.

Amount That Could Be Used in FY 15: Funds in the amount of \$575,000 could be used to continue pumping operations at Greentree Reservoirs (\$75.0) and scoping for EIS for levee enlargement project (\$500.0).

Project Sponsor/Customer: Yazoo-Mississippi Delta Levee Board and Mississippi Levee Board

Congressional Interest: Senate: Cochran and Wicker (MS); House: Thompson (MS-2).

Phase	Estimated Federal Cost of Phase	Federal Funding Thru FY 13	FY 14 Allocation	FY 15 Budget	FY 15 Total Capability
Construction	\$507,000,000	\$61,658,000	\$400,000	\$0	\$575,000



**Yazoo Basin,
Main Stem, MS**



US Army Corps
of Engineers
Vicksburg District

Project Fact Sheet

Yazoo Basin, Main Stem, MS

Flood Control Acts of 1936, Sec. 4 and 8a; 1941, Sec. 3b and 3g; 1946, Sec. 3, 10f, and 10g

Mississippi River and Tributaries, Construction (FRM)

Location: The Main Stem feature in the Yazoo Basin consists of enlarged levee improvements along the Yazoo, Tallahatchie, and Coldwater Rivers from Yazoo City to Prichard, MS; and channel clearing, cutoffs, and channel enlargement along the Yazoo, Tallahatchie, and Coldwater Rivers from Yazoo City to Arkabutla Lake. Sheley Bridge is located on the Tallahatchie River in Tallahatchie County, MS.

Description: The authorized work provides protection to adjacent areas against floods. The major remaining work includes raising deficient levees and closure of gaps in the Yazoo River levee system. This work is deferred until completion of the Mississippi River mainline and Yazoo Backwater levees.

Issues: No issues.

Importance: Construction of bank stabilization measures and drift deflectors to protect Sheley Bridge supports was completed in FY 86. Monitoring of the bank stabilization measures reduces risks to bridge stability.

Risk: Monitoring of bank stabilization measures is needed to ensure the integrity of the bridge supports.

Consequence: Inability to monitor, report, and recommend engineering solutions should detrimental bank stability issues occur at vehicle bridge crossing.



Inspection at Sheley Bridge

Activities for FY 14: None.

Acquisition Strategy: No contracts are scheduled to be awarded in FY 14.

Amount That Could Be Used in FY 15: No construction funds are needed for FY15.

Project Sponsor/Customer: Yazoo-Mississippi Delta Levee Board

Congressional Interest: Senate: Cochran and Wicker (MS); House: Thompson (MS-2).

Phase	Estimated Federal Cost of Phase	Federal Funding Thru FY 13	FY 14 Allocation	FY 15 Budget	FY 15 Total Capability
Construction	\$267,800,000	\$34,879,000	\$0	\$0	\$0

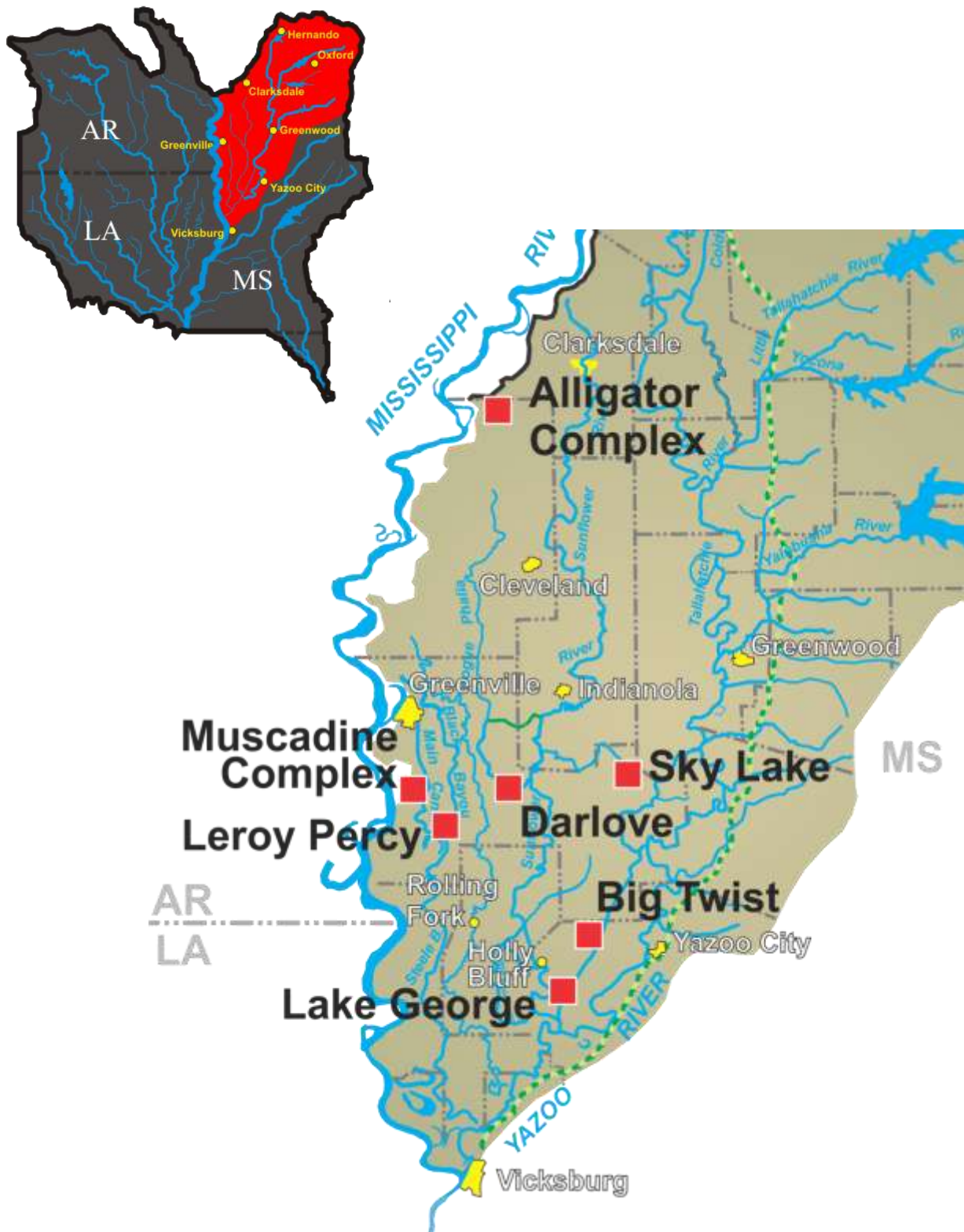


MR&T Maintenance

MR&T Maintenance

MR&T Maintenance

The MR&T Maintenance program focuses on the need to preserve the existing infrastructure and provide justified levels of service at the least cost.



Yazoo Basin Mitigation Areas



**US Army Corps
of Engineers**
Vicksburg District

Project Fact Sheet

Yazoo Basin, Mitigation

Flood Control Acts of 1941 and 1944

Mississippi River and Tributaries, Construction (FRM)

Location: The Yazoo Basin

Description: A total of 29,000 acres were purchased in fee title and reforested between 1990 and 2011 for 5 MR&T projects (Upper Yazoo Project, Upper Steele Bayou, Mississippi River Levees, Big Sunflower, and Yazoo Backwater). The acquisition, development and O&M are Federal responsibility (100%). Of the total land purchased, approximately 22,000 acres are managed and 7,000 acres are unmanaged. The District reimburses \$420,000 annually to the Mississippi Department of Wildlife, Fisheries and Parks to manage 14,910 acres at Lake George, Muscadine and Sky Lake. The District reimburses \$110,000 annually to the US Fish and Wildlife Service to manage 7,073 acres at Big Twist. Without full funding, the Mississippi Department of Wildlife, Fisheries and Parks will only manage through June 30, 2015. The US Fish and Wildlife service will continue to manage Big Twist but at a reduced level of service. In addition to land and reforestation costs, The Vicksburg District has a big investment in road and other infrastructure development as well as equipment to operate the areas. Without funding to operate and maintain, much of this development would be lost or vandalized.

Issues: Minimal funding is available for the management of mitigation features. MDWFP indicated that they will manage through June of 2015 while USFWS will continue to manage Big Twist but at a reduced level of service. O&M funds are not adequate to continue maintenance of lands currently being managed. In addition, 7,000 acres have never been under management



Waterfowl - Yazoo Backwater Area

Risk: Tree mortality, theft, and/or vandalism of project infrastructure. Loss of mitigation credits.

Consequence: Public utilizing lands without restrictions would significantly increase risk of vandalism and theft of project infrastructure. Without proper maintenance of fire lanes and ditches, there would be an increased risk of tree mortality from fire and flooding. Nuisance animals can cause damage if not properly controlled. Without proper management, the mitigation requirements set forth under the terms of the Corps of Engineers' plans would not be met.

Activities for FY 14: Funds are being used to fund the operation and maintenance of the managed areas at a reduced level of service.

Acquisition Strategy: No contracts are scheduled to be awarded in FY 14.

Amount That Could Be Used in FY 15: Funds in the amount of \$950,000 could be used to continue management of mitigation land.

Project Sponsor/Customer: Yazoo-Mississippi Delta Levee Board and Mississippi Levee Board

Congressional Interest: Senate: Cochran and Wicker (MS); House: Thompson (MS-2).



Mississippi River Levees, AR, LA, and MS



**US Army Corps
of Engineers**
Vicksburg District

FCA's 1928, 1936, 1938, 1941, 1944, 1946, 1950, 1954, 1962, 1965, 1968, River Basin Monetary
Authorization Act of 1971, WRDA 92, WRDA 00

Project Fact Sheet

Mississippi River Levees, AR, LA & MS

Mississippi River and Tributaries, Maintenance (FRM)

Location: The Mississippi River Levee system on the west bank extends from Allenville, MO, southward to Venice, LA, and on the east bank from Hickman, KY, to opposite Venice, LA, except where interrupted by hills and tributary streams.

Description: The Mississippi River Levee System provides flood risk reduction to over 23 thousand square miles in the alluvial valley subject to flooding by the project flood. The alluvial valley is over 650 miles long and varies in width from 20 to 90 miles. Numerous railroads, highways, and airfields connecting the major transportation centers lie within the protected area as do several major transcontinental communication routes. In addition to highly developed agricultural areas, the levees afford protection to urban areas and many industries.

Issues: Levee slides are being repaired along the Mississippi River Levee System on the East and West banks utilizing supplemental funding. Additional slides developed as a result of heavy rainfall in December 2013 and January 2014.

Importance: Although levee slides are an expected occurrence in any levee system, the repair of levee slides is of prime importance in maintaining a robust levee system capable of performing its design function during all flood events up to and including the project design flood.

Risk: Leaving slides in disrepair may lead to levee safety issues, levee certification issues, reduced levels of flood protection, and increased risk of flood damage.

Consequence: Failure to operate and maintain the levees appropriately jeopardizes project integrity, and places the safety of the public at increased risk.



(Typical MRL Levee Slide)

Activities for FY 14: Funds are being used to perform routine operation and maintenance activities, repair levee slides, and resurface levees.

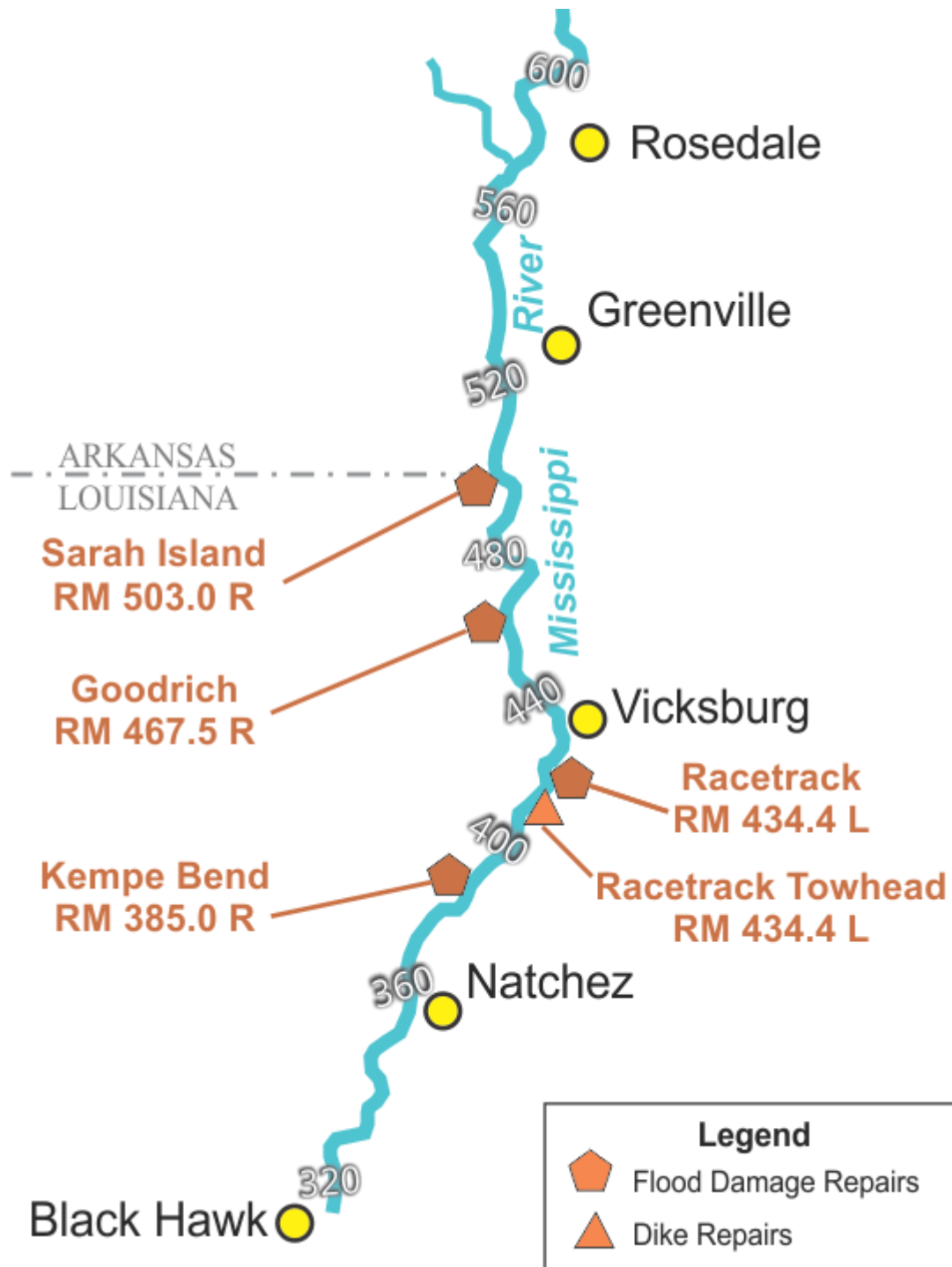
Acquisition Strategy: No contracts are scheduled to be awarded in FY 14.

Amount That Could Be Used in FY 15: Budgeted funds of \$2,331,000 will be used to perform routine operation and maintenance activities. Additional funds in the amount of \$1,300,000 could be used to fund levee slide repairs that threaten the integrity of the levees threaten life and safety (\$1,200) and operation and maintenance of mitigation areas (\$100).

Project Sponsor/Customer: 5th LA Levee District, Southeast Arkansas Levee District, & the Board of Mississippi Levee Commissioners

Congressional Interest: Senate: Boozman and Pryor (AR), Landrieu and Vitter (LA), Cochran and Wicker (MS); House: Crawford (AR-1), Cotton (AR-4); Scalise (LA-1), Fleming (LA-4), McAllister (LA-5), Nunnelee (MS-1), Thompson (MS-2).

Phase	FY 14 Allocation	FY 15 Budget	FY 15 Total Capability
Maintenance	\$3,192,000	\$2,331,000	\$3,631,000



Mississippi River Channel Improvement Maintenance



**US Army Corps
of Engineers**
Vicksburg District

Mississippi River Channel Improvement, AR, LA, & MS

FCA 1928, Sec 1; 1936, Sec 1; 1938, Sec 4; 1941, Sec 3; 1944, Sec 10; 1962, Sec 203; 1965, Sec 201, 204; 1966, Sec 202, 203; and 1970, Sec 207

Project Fact Sheet

Mississippi River and Tributaries, Maintenance (FRM)

Location: The project is located in the Mississippi River and along its banks from the vicinity of Cessions Towhead at River Mile 616 AHP to Union Point at River Mile 326 AHP, a distance of approximately 290 miles.

Description: The plan of improvement consists of stabilization of the Mississippi River main channel banks by way of revetments to prevent erosion that would threaten the integrity of the mainline levees.

Issues: The Lower Mississippi River experienced the flood of record at many locations during 2011. As a result of this flood, many channel improvement revetments and dikes were damaged.

Importance: Revetment construction maintains channel alignment and protects the banks from erosion.

Risk: Catastrophic damage to the river banks and adjacent mainline levee is likely to occur if the system is not maintained as constructed.

Consequence: Failure to adequately fund will result in channel deterioration and continued erosion of banks and/or failure of revetments which would adversely impact channel alignment and threaten the integrity of the mainline levee system.



Revetment – Articulated Concrete Mat

Activities for FY 14: Funds are being used to complete flood damage repairs at 4 priority revetment sites- Sarah Island, LA RM 503.0R, Goodrich, LA – RM 467.5R, Racetrack, MS – RM 434.4L, Kempe Bend, LA – RM 385.0R, dike repairs at Racetrack Towhead – RM 431.5R and a stone repairs contract for both revetments and dikes.

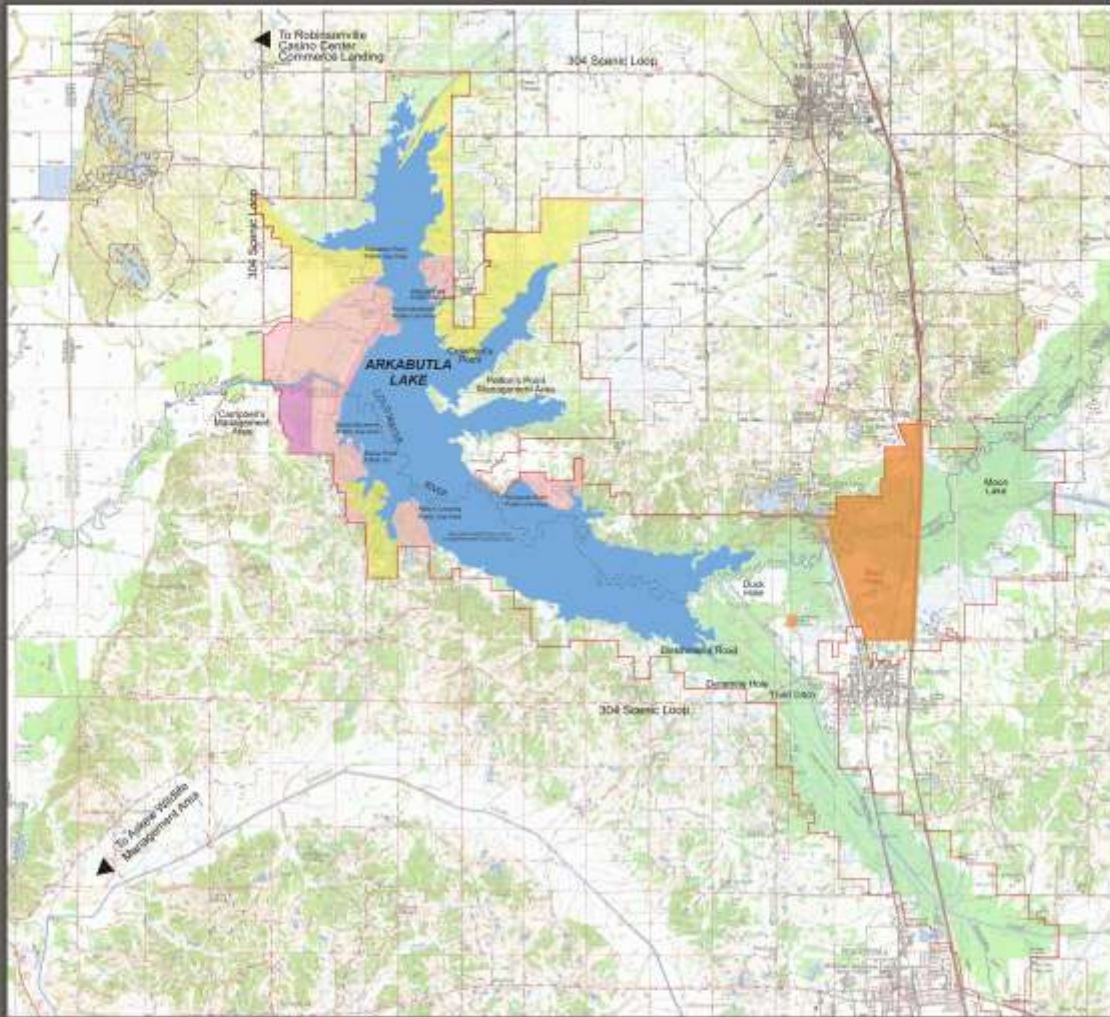
Acquisition Strategy: A contract for stone bank repairs will be awarded in FY 14.

Amount That Could Be Used in FY 15: Budgeted funds of \$15,052,000 will be used to perform routine maintenance on existing revetments. Additional funds of \$18,000,000 could be used to fully fund stone repairs to existing dikes damaged during the 2011 flood (\$12,000.0) and maintain revetments to provide for channel alignment with stone repairs to revetments and dikes (\$6,000.0).

Project Sponsor/Customer: Mississippi Levee Board, 5th Louisiana Levee Board, and Southeast Arkansas Levee Board

Congressional Interest: Senate: Boozman and Pryor (AR), Landrieu and Vitter (LA), Cochran and Wicker (MS), House: Crawford (AR-1), Cotton (AR-4), Scalise (LA-01), McAllister (LA-5), Fleming (LA-04), Nunnelee (MS-01), Thompson (MS-2), and Harper (MS-3).

Phase	FY 14 Allocation	FY 15 Budget	FY 15 Total Capability
Maintenance	\$14,052,000	\$15,052,000	\$33,052,000



**Yazoo Basin, MS,
Arkabutla Lake**



**US Army Corps
of Engineers**
Vicksburg District

Project Fact Sheet

Yazoo Basin, MS, Arkabutla Lake

Flood Control Acts of 1928, 1936, 1937, 1938, 1941, 1944, and 1946

Mississippi River and Tributaries, Maintenance, FRM, REC, ENS

Location: Arkabutla Lake is located in northwest Mississippi, north of Arkabutla, Mississippi. Arkabutla Dam is located in Tate and DeSoto Counties, and the lake encompasses portions of both counties.

Description: Arkabutla Lake is a 57,250-acre multi-purpose project located on the Coldwater River and stores floodwater to provide for flood damage reduction in the Yazoo Basin. Outdoor recreation and tourism associated with the lake contribute significant support to the regional economy.

Issues: Due to the age of this project, continued emphasis on critical routine and non-routine maintenance activities is required to ensure the integrity of the project and its flood control structures, in order to protect people and property from downstream flooding.

Importance: Arkabutla Dam, completed in 1943 as a part of the comprehensive flood control plan for the Mississippi River and Tributaries Project, is operated in coordination with Sardis, Enid, and Grenada Dams to reduce flood damages in the Yazoo Basin of the Mississippi Delta, one of the most significant agricultural production areas in the Nation. Through FY 13, these four projects have prevented over \$1.3 billion in flood damages within the Yazoo Basin. Following construction of Arkabutla Dam, land-and water-based recreation became a popular pastime for project visitors. In FY 12, over 854,000 visitors utilized the project and its 13 developed recreation areas operated by the Corps. With multiplier effects, visitor spending resulted in \$14.4 million total sales, \$5.3 million in total personal income, and supported 224 jobs in the local communities. Environmental stewardship activities are conducted to protect and enhance the project's vegetative, wildlife, fisheries, and cultural resources.

Risk: Failure to adequately fund this project jeopardizes the flood risk management capabilities for which the project was designed and has performed in an excellent manner for over 70 years. Funding is required to adequately operate and maintain project recreational facilities and continue mandated environmental stewardship activities.

Consequence: Failure to adequately operate and maintain the project and its facilities would jeopardize project integrity and potentially lead to an increase in the risk of damages from flooding. Reductions in recreational service levels will potentially lead to reduced facility availability, decreased public safety, and lower levels of recreational visitor satisfaction. Reduction in environmental stewardship services may result in inability to monitor and control such

things as cultural resource sites, endangered species, invasive species, and forestry resources.



Arkabutla Dam

Activities for FY 14: Funds are being used to continue routine operation and maintenance at a reduced level of service in all authorized mission areas and to construct Spillway Bridge road.

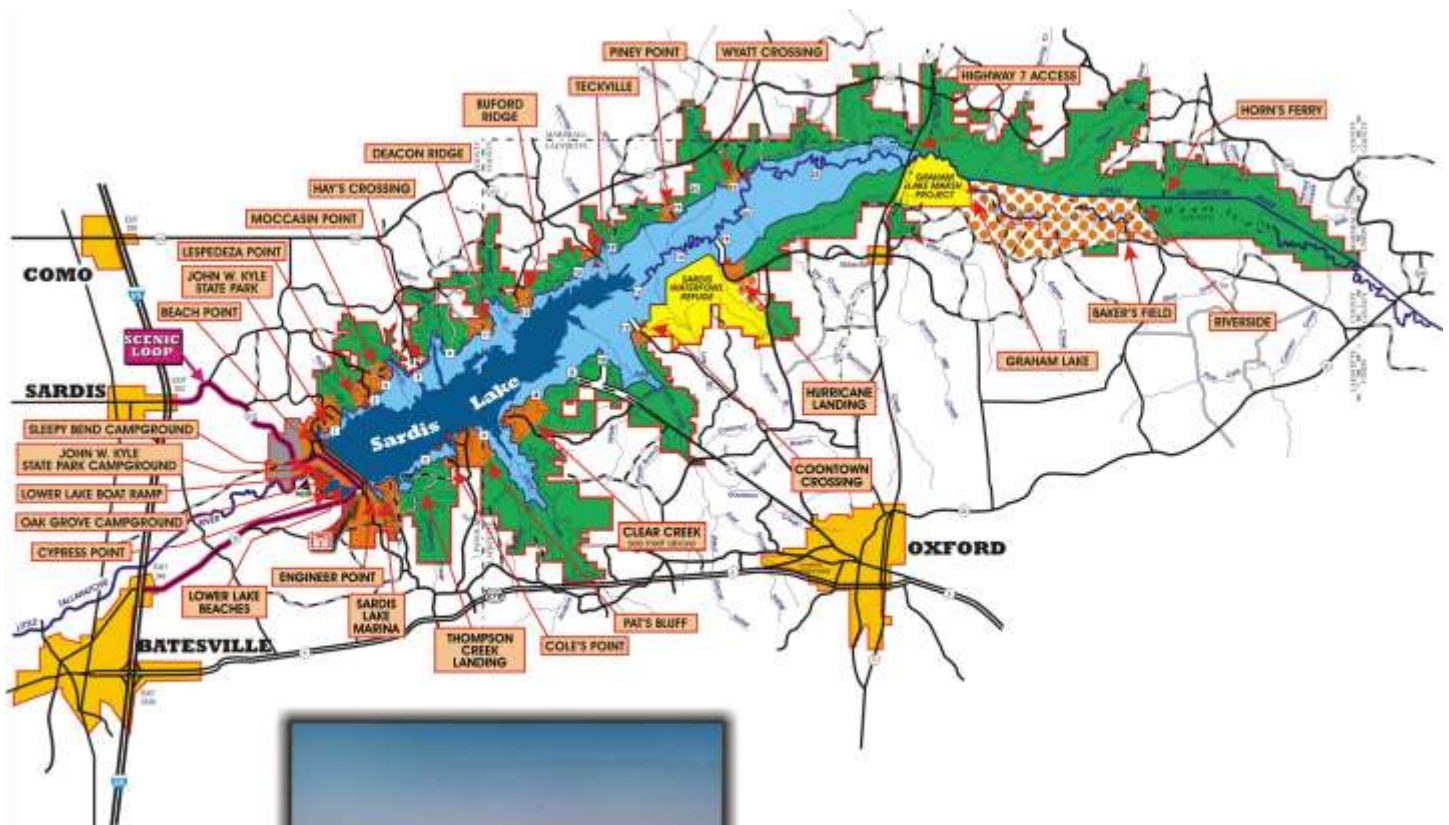
Acquisition Strategy: None.

Amount That Could Be Used in FY 15: Budgeted funds of \$5,494,000 will be used to continue operation and maintenance at a reduced level of service in all authorized mission areas. Additional funds of \$3,570,000 could be used to fund cultural resources survey (\$25.0), complete Pratt Road to Spillway Bridge (\$1,350.0), safety and recreational signs (\$35.0), procurement replacement tilt-bed truck (\$110.0), P&S to replace toe ditch and outfall structure (\$100.0), replace heaters in Waterborne restrooms (\$50.0), GIS/GPS equipment upgrade (\$20.0), P&S for repair of Drop Inlets on the face of the dam (\$75.0), P&S for modernization of Hernando Point boat ramp (\$50.0), shoreline erosion repair at Hernando Point (\$550.0), P&S for Hernando Point day use area modernization (\$220.0), replacement of dam safety equipment including D-6 High Track dozer (\$410.0), update master plan (\$300.0), and additional backlog maintenance (\$295.0).

Project Sponsor: N/A.

Congressional Interest: Senate: Wicker and Cochran (MS); House: Nunnelee (MS-1).

Phase	FY 14 Allocation	FY 15 Budget	FY 15 Total Capability
Maintenance	\$6,854,00	\$5,494,000	\$6,954,000



**Yazoo Basin, MS,
Sardis Lake**



**US Army Corps
of Engineers**
Vicksburg District

Project Fact Sheet

Yazoo Basin, MS, Sardis Lake

Flood Control Acts of 1928, 1936, 1937, 1938, 1941, 1944, and 1946

Mississippi River and Tributaries, Maintenance (FRM, REC, ENS)

Location: Sardis Lake is located in north-central Mississippi southeast of Sardis, Mississippi. Sardis Dam is located in Panola County, and the lake encompasses portions of Panola, Lafayette, and Marshall Counties.

Description: Sardis Lake is a 98,357-acre multi-purpose project located on the Little Tallahatchie River and stores floodwater to provide for flood damage reduction in the Yazoo Basin. Outdoor recreation and tourism associated with the lake contribute significant support to the regional economy.

Issues: Due to the age of this project, continued emphasis on critical routine and non-routine maintenance activities is required to ensure the integrity of the project and its flood control structures, in order to protect people and property from downstream flooding.

Importance: Sardis Dam, completed in 1940 as a part of the comprehensive flood control plan for the Mississippi River and Tributaries Project, is operated in coordination with Arkabutla, Enid, and Grenada Dams to reduce flood damages in the Yazoo Basin of the Mississippi Delta, one of the most significant agricultural production areas in the Nation. Through FY 13, these four projects have prevented over \$1.3 billion in flood damages within the Yazoo Basin. Following construction of Sardis Dam, land- and water-based recreation became a popular pastime for project visitors. In FY 12, over 1.3 million visitors utilized the project and its 20 developed recreation areas operated by the Corps. With multiplier effects visitor spending resulted in \$26.2 million total sales, \$8.4 million in total personal income, and supported 427 jobs in the local communities. Environmental stewardship activities are conducted to protect and enhance the project's vegetative, wildlife, fisheries, and cultural resources.

Risk: Failure to adequately fund this project jeopardizes the flood risk management capabilities for which the project was designed and has performed in an excellent manner for over 70 years. Funding is required to adequately operate and maintain project recreational facilities and continue mandated environmental stewardship activities.

Consequence: Failure to adequately operate and maintain the project and its facilities would jeopardize project integrity and potentially lead to an increase in the risk of damages from flooding. Reductions in recreational service levels will potentially lead to reduced facility availability, decreased public safety, and lower levels of recreational visitor satisfaction. Reduction in environmental stewardship services may result in inability to monitor and control such

things as cultural resource sites, endangered species, invasive species, and forestry resources.



Activities for FY 14: Funds are being used to continue routine operation and maintenance at a reduced level of service in all authorized mission areas.

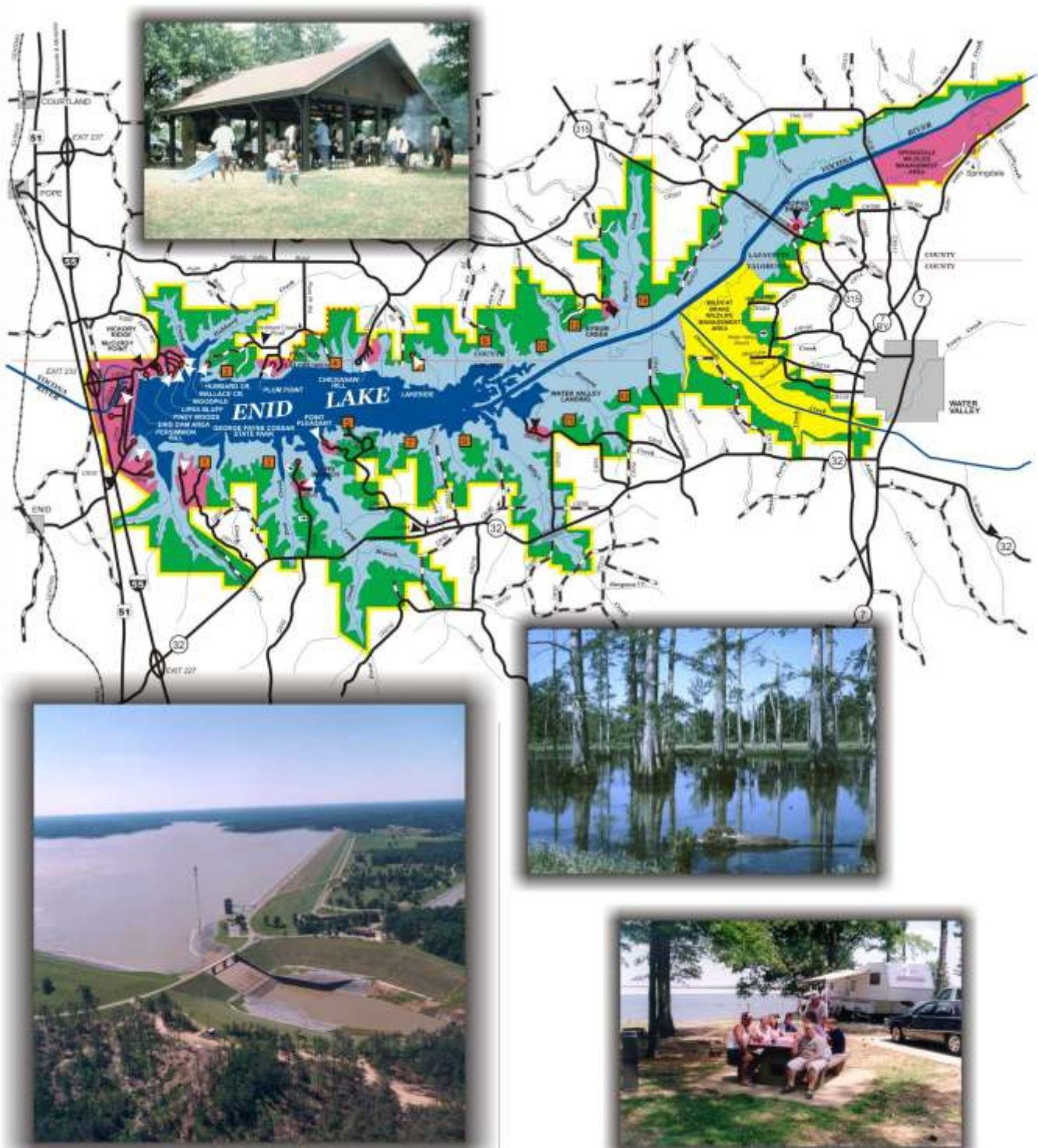
Acquisition Strategy: No contracts are scheduled to be awarded in FY 14.

Amount That Could Be Used in FY 14: Budgeted funds of \$6,629,000 will be used to continue operation and maintenance at a reduced level of service in all authorized mission areas. Additional funds of \$7,315,000 could be used fully fund stewardship activities (\$400.0), update master plan (\$475.0), P&S to replace outfall structure at downstream end of toe ditch (\$100.0), purchase & install solar panels and lighting at Wyatt's Crossing Rec Area (\$75.0), P&S activities (\$515.0), pave road at Hurricane Landing and Clear Creek (\$1,500.0), replace dam safety equipment (\$600.0), complete campground modernizations (\$250.0), raise elevation of State Park Road (\$2,150.0), perform well inspections (\$100.0), additional backlog maintenance items (\$1,150.0)

Project Sponsor: N/A.

Congressional Interest: Senate: Wicker and Cochran (MS); House: Nunnelee (MS-1), Thompson (MS-2).

Phase	FY 14 Allocation	FY 15 Budget	FY 15 Total Capability
Maintenance	\$6,493,000	\$6,629,000	\$13,944,000



**Yazoo Basin, MS,
Enid Lake**



**US Army Corps
of Engineers**
Vicksburg District

Project Fact Sheet

Yazoo Basin, MS, Enid Lake

Flood Control Acts of 1928, 1936, 1937, 1938, 1941, 1944, and 1946

Mississippi River and Tributaries, Maintenance (FRM, REC, ENS)

Location: Enid Lake is located in north-central Mississippi southeast of Batesville, Mississippi. Enid Dam is located in Yalobusha County, and the lake encompasses portions of Panola, Yalobusha, and Lafayette Counties.

Description: Enid Lake is a 44,036-acre multi-purpose project located on the Yocona River and stores floodwater to provide for flood damage reduction in the Yazoo Basin. Outdoor recreation and tourism associated with the lake contribute significant support to the regional economy.

Issues: Due to the age of this project, continued emphasis on critical routine and non-routine maintenance activities is required to ensure the integrity of the project and its flood control structures, in order to protect people and property from downstream flooding.

Importance: Enid Dam, completed in 1952 as a part of the comprehensive flood control plan for the Mississippi River and Tributaries Project, is operated in coordination with Arkabutla, Grenada, and Sardis Dams to reduce flood damages in the Yazoo Basin of the Mississippi Delta, one of the most significant agricultural production areas in the Nation. Through FY 13, these four projects have prevented over \$1.3 billion in flood damages within the Yazoo Basin. Following construction of Enid Dam, land-and water-based recreation became a popular pastime for project visitors. In FY 12, over 569,000 visitors utilized the project and its 15 developed recreation areas operated by the Corps. With multiplier effects visitor spending resulted in \$10.5 million total sales, \$3.6 million in total personal income, and supported 161 jobs in the local communities. Environmental stewardship activities are conducted to protect and enhance the project's vegetative, wildlife, fisheries, and cultural resources.

Risk: Failure to adequately fund this project jeopardizes the flood risk management capabilities for which the project was designed and has performed in an excellent manner for over 61 years. Funding is required to adequately operate and maintain project recreational facilities and continue mandated environmental stewardship activities.

Consequence: Failure to adequately operate and maintain the project and its facilities would jeopardize project integrity and potentially lead to an increase in the risk of damages from flooding. Reductions in recreational service levels will potentially lead to reduced facility availability, decreased public safety, and lower levels of recreational visitor satisfaction. Reduction in environmental stewardship services may result in inability to monitor and control such things as cultural resource sites, endangered species, invasive species, and forestry resources.



Enid Dam

Activities for FY 14: Funds are being used to continue routine operation and maintenance at a reduced level of service in all authorized mission areas.

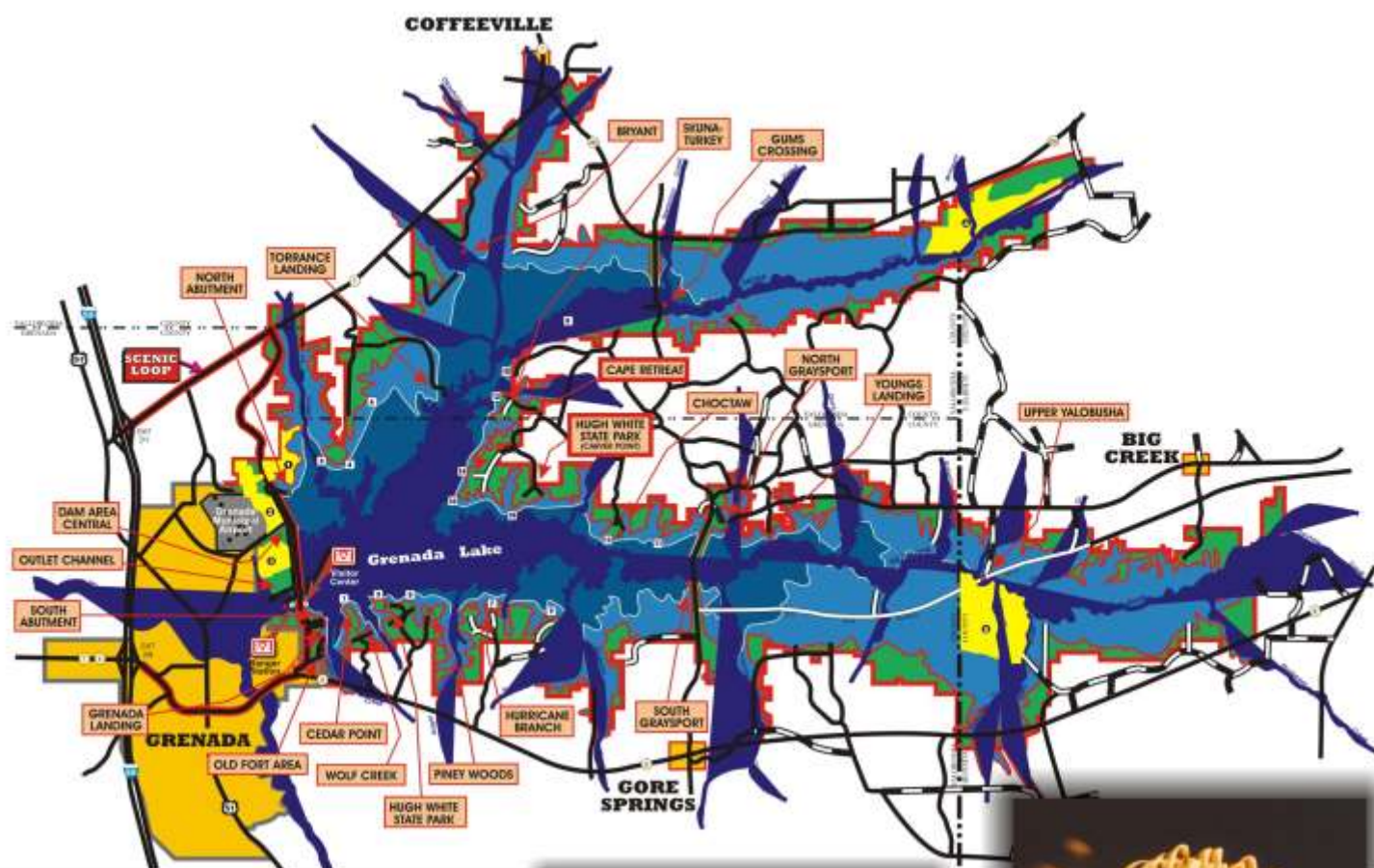
Acquisition Strategy: No contracts are scheduled to be awarded in FY 14.

Amount That Could Be Used in FY 15: Budgeted funds of \$4,898,000 will be used to continue operation and maintenance at a reduced level of service in all authorized mission areas. District support/services as well as O&M Contract will be funded at minimum levels. Additional funds of \$4,295,000 could be used to fully fund routine operations of dam and structures (\$250k); restore customer service levels to desirable standards for the visiting public (\$150k); seismic evaluation of intake structure (\$150k); blast and paint emergency spillway bridge (\$120k); install water well at Persimmon Hill and Wallace Creek Recreation Areas (\$922k); replace flood damage reduction equipment, 2 dozers & mini-excavator (\$500k); prepare plans & specifications and replace wooden fishing pier at outlet channel with concrete structure (\$750k); replace spillway surface drains (\$275k); restroom/shower house renovations at WV Landing and Riverview (\$250k); GIS/GPS systems upgrades (50k); cultural resource surveys (40k); update project master plan (300k); fire lane maintenance and development (38k); replace riprap on North Abutment of Dam (\$500k).

Project Sponsor: N/A.

Congressional Interest: Senate: Wicker and Cochran (MS); House: Thompson (MS-2), Nunnelee (MS-1).

Phase	FY 14 Allocation	FY 15 Budget	FY 15 Total Capability
Maintenance	\$4,777,000	\$4,898,000	\$9,193,000



**Yazoo Basin, MS,
Grenada Lake**



**US Army Corps
of Engineers**
Vicksburg District

Project Fact Sheet

Yazoo Basin, MS, Grenada Lake

Flood Control Acts of 1928, 1936, 1937, 1938, 1941, 1944, and 1946

Mississippi River and Tributaries, Maintenance (FRM, REC, ENS)

Location: Grenada Lake is located in north-central Mississippi northeast of Grenada, Mississippi. Grenada Dam is located in Grenada County, and the lake encompasses portions of Grenada, Yalobusha, and Calhoun Counties.

Description: Grenada Lake is a 90,379-acre multi-purpose project located on the Yalobusha River and stores floodwater to provide for flood damage reduction in the Yazoo Basin. Outdoor recreation and tourism associated with the lake contribute significant support to the regional economy.

Issues: Due to the age of this project, continued emphasis on critical routine and non-routine maintenance activities is required to ensure the integrity of the project and its flood control structures, in order to protect people and property from downstream flooding.

Importance: Grenada Dam, completed in 1954 as a part of the comprehensive flood control plan for the Mississippi River and Tributaries Project, is operated in coordination with Arkabutla, Enid, and Sardis Dams to reduce flood damages in the Yazoo Basin of the Mississippi Delta, one of the most significant agricultural production areas in the Nation. Through FY 13, these four projects have prevented over \$1.3 billion in flood damages within the Yazoo Basin. Following construction of Grenada Dam, land-and water-based recreation became a popular pastime for project visitors. In FY 12, over 1.8 million visitors utilized the project and its 26 developed recreation areas operated by the Corps. With multiplier effects visitor spending resulted in \$38.8 million total sales, \$12.9 million in total personal income, and supported 676 jobs in the local communities. Environmental stewardship activities are conducted to protect and enhance the project's vegetative, wildlife, fisheries, and cultural resources.

Risk: Failure to adequately fund this project jeopardizes the flood risk management capabilities for which the project was designed and has performed in an excellent manner for over 59 years. Funding is required to adequately operate and maintain project recreational facilities and continue mandated environmental stewardship activities.

Consequence: Failure to adequately operate and maintain the project and its facilities would jeopardize project integrity and potentially lead to an increase in the risk of damages from flooding. Reductions in recreational service levels will potentially lead to reduced facility availability, decreased public safety, and lower levels of recreational

visitor satisfaction. Reduction in environmental stewardship services may result in inability to monitor and control such things as cultural resource sites, endangered species, invasive species, and forestry resources.



Grenada Dam

Activities for FY 14: Funds are being used to continue routine operation and maintenance at a reduced level of service in all authorized mission areas.

Acquisition Strategy: No contracts are scheduled to be awarded in FY 14.

Amount That Could Be Used in FY 15: Budgeted funds of \$5,705,000 will be used to continue operation and maintenance at a reduced level of service in all authorized mission areas. Additional funds of \$3,718,000 could be used to fully fund routine operations of dam and structures P&S for replacement of riprap on the face of the Dam (\$500k), P&S for installation of concrete on upper and lower berm on the downstream face of dam (\$500k), restore customer service levels to desirable standards for the visiting public (\$150k), design and replace visitor center exhibits (\$150k), purchase dam safety equipment - dump truck (\$165k), replace fire dozer and flatbed truck (\$365k), and P&S for dredging at Yalobusha River (\$500k), replace GIS/GPS systems (\$50k) and additional maintenance items (\$1,338.0)

Project Sponsor: N/A.

Congressional Interest: Senate: Wicker and Cochran (MS); House: Thompson (MS-2), Nunnelee (MS-1).

Phase	FY 14 Allocation	FY 15 Budget	FY 15 Total Capability
Maintenance	\$5,164,000	\$5,705,000	\$9,423,000





**US Army Corps
of Engineers**
Vicksburg District

Project Fact Sheet

Yazoo Basin, Greenwood, MS

Flood Control Acts of 1928, 1936, 1937, 1938, 1941, 1944, and 1946

Mississippi River and Tributaries, Maintenance (FRM)

Location: The project is located in the Yazoo Basin, Mississippi.

Description: The project includes the operation and maintenance of the city of Greenwood Protection Works and includes 55 miles of levees and 14 miles of channels, 2 miles of ditch, 59 drainage structures, 4 pumping plants and 7 weirs.

Issues: Critical work is needed to ensure the integrity of the project to protect people and property from flooding. This work consists of providing adequate levels of funding to the O&M contractor for the removal of vegetation, encroachments and utility penetrations of the levees in the Greenwood Protection Works and to operate the drainage structures and pump stations on an as needed basis.

Importance: Greenwood is a major center of transportation and commerce for the portion of the State of Mississippi known as the Mississippi Delta. The project protects the city of Greenwood from flooding by the Tallahatchie, Yalobusha and Yazoo Rivers.

Risk: Leaving the project in disrepair may lead to flooding issues and reduced levels of flood protection in the project area.

Consequence: Failure to operate and maintain the project would jeopardize the project integrity and benefits.



Item 184 –View of recent work towards removing trees from the levee slopes. Stumps are scheduled for removal in the near future.

Activities for FY 14: Funds are being used to continue minimal operation and maintenance.

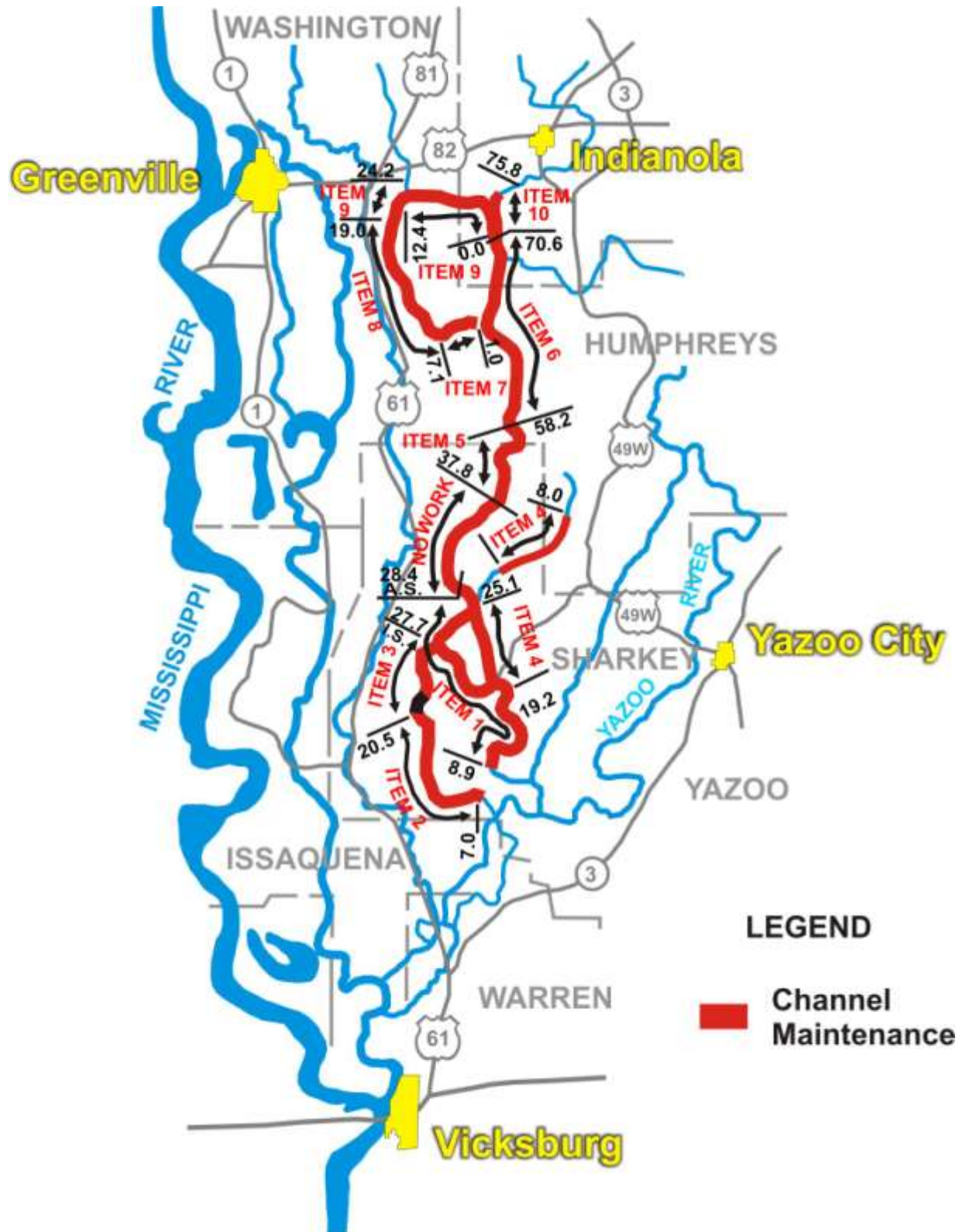
Acquisition Strategy: No contracts are scheduled to be awarded in FY 14.

Amount That Could Be Used in FY 15: Budgeted funds of \$807,000 will be used for routine operation and maintenance, data gathering and periodic inspections; critical work needed to ensure the integrity of the project to protect people & property from flooding. Additional funds in the amount of \$405,000 could be used to conduct inspections of structures and bridges (\$75), install pipelines to restore structures and gravel surfacing for levee (\$200) and levee slides (\$130).

Project Sponsor/Customer: Yazoo-Mississippi Delta Levee Board

Congressional Interest: Senate: Wicker and Cochran (MS); House: Thompson (MS-2).

Phase	FY 14 Allocation	FY 15 Budget	FY 15 Total Capability
Maintenance	\$788,000	\$807,000	\$1,212,000



**Big Sunflower River, MS
(Including Bogue Phalia)**



US Army Corps
of Engineers
Vicksburg District

Yazoo Basin, Big Sunflower River (Including Bogue Phalia), MS

Flood Control Acts of 1928, 1936, 1937, 1938, 1941, 1944, 1946, 1962 and 1965

Mississippi River and Tributaries, Maintenance (FRM)

Location: The Big Sunflower River Basin comprises an area of approximately 4,200 square miles in northwest Mississippi.

Description: The project was designed to provide flood protection via improvements to drainage channels that channel storm water runoff in the west central Yazoo Basin areas west of Highway 61 in the vicinity of Greenville, MS.

Issues: The existing flood control project is not currently functioning as originally constructed due to the loss of channel design capacity both from vegetative growth and sediment accumulation. The current project will restore the channels to original design capacities. Critical work is needed to ensure the integrity of the project to protect people and property from flooding. This work consists of repairs to weirs constructed in the Bogue Phalia to maintain vegetation control and regulate storm water runoff.

Importance: The purpose of the remaining work in this project is to provide channel improvement that will reduce the flooding in Greenville from Main Canal and will protect 195,000 acres against the design flood and substantially benefit an additional 395,000 acres. Project mitigation for terrestrial and wetland losses will require acquisition of approximately 5,250 cleared acres of frequently flooded agricultural lands for reformulation.

Risk: Leaving the project in disrepair may lead to flooding issues and reduced levels of flood protection in the project area.

Consequence: Failure to operate and maintain the project would jeopardize the project integrity and benefits.



Big Sunflower River

Activities for FY 14: Funds are being used for operation and maintenance of the project.

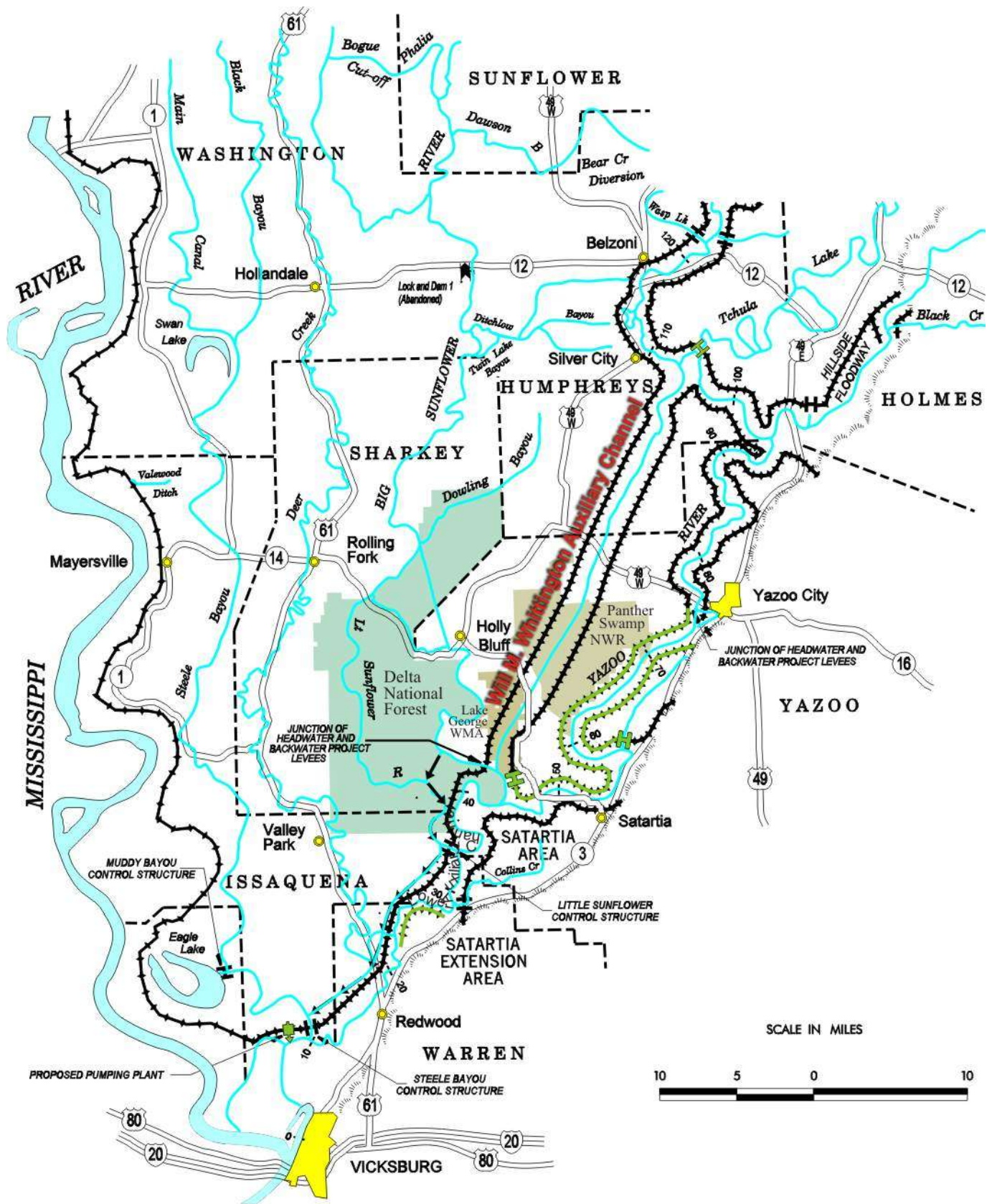
Acquisition Strategy: No contracts are scheduled to be awarded in FY 14.

Amount That Could Be Used in FY 15: Budgeted funds of \$185,000 will be used for routine operation and maintenance including critical work needed to ensure the integrity of the project to protect people & property from flooding; water control analysis & data gathering, operation of gated flood controls and mitigation property. Additional funds in the amount of \$100,000 could be used to fully fund O&M for mitigation lands in the Mississippi Delta, Muscadine and Darlove Complexes.

Project Sponsor/Customer: Yazoo-Mississippi Delta Levee Board

Congressional Interest: Senate: Wicker and Cochran (MS); House: Thompson (MS-2).

Phase	FY 14 Allocation	FY 15 Budget	FY 15 Total Capability
Maintenance	\$185,000	\$185,000	\$285,000



Yazoo Backwater, MS



**US Army Corps
of Engineers**
Vicksburg District

Project Fact Sheet

Yazoo Basin, Yazoo Backwater, MS

Flood Control Acts of 1941, 1944, 1965

Mississippi River and Tributaries, Maintenance (FRM)

Location: The project is located in the Yazoo Basin, MS.

Description: The project includes the operation and maintenance of seven drainage structures.

Issues: Critical work is needed to ensure the integrity of the project to protect people and property from flooding. The Great Flood of 2011 demonstrated the requirement that the Steele Bayou, Little Sunflower and Muddy Bayou Structures be 100 percent reliable. To continue to provide this reliability, it is necessary that stoplogs that meet current Corps hydraulic steel structure standards be fabricated for the Steele Bayou Structure. These stoplogs will be used to provide access to the structure gates for inspection and repair, when necessary.

Importance: The flood control feature protects a large agricultural area and many small communities in the lower Yazoo Delta from backwater flooding of the Mississippi River.

Risk: Leaving the project in disrepair may lead to flooding issues and reduced levels of flood protection in the project area.

Consequence: Failure to operate and maintain the project would jeopardize the project integrity and benefits.



Steele Bayou Drainage Structure on the Yazoo Backwater Levee

Activities for FY 14: Funds are being used to continue operation of project features and for the fabrication of Steele Bayou Structure Stop logs. Supplemental funds are being used to complete repairs of bank stability issues (\$3,075,000) and levee slides (\$60,000) on the Yazoo Backwater Levee System, as well as award a contract to repair scour in the Steele Bayou Structure outlet channel (\$9,000,000).

Acquisition Strategy: Award two construction contracts - repair bank stability issues near the levee system and Steele Bayou Structure outlet channel repair.

Amount That Could Be Used in FY 15: Budgeted funds of \$544,000 will be used for routine operation and maintenance, data gathering and periodic inspections; critical work needed to ensure the integrity of the project to protect people & property from flooding. Additional funds in the amount of \$2,600,000 could be used for to fabricate (2) gates at Little Sun (\$2,000,000), design Steele Bayou 4 Gates (\$200,000), O&M mitigation lands (\$100,000), and levee slide repairs and stone for levee surfacing (\$300,000).

Project Sponsor/Customer: Board of Mississippi Levee Commissioners

Congressional Interest: Senate: Wicker and Cochran (MS); House: Thompson (MS-2).

Phase	FY 14 Allocation	FY 14 Supplemental	FY 15 Budget	FY 15 Total Capability
Maintenance	\$2,226,000	\$12,135,000	\$544,000	\$3,144,000

Legend

-  Headwater
-  Sunflower
-  Backwater
-  Yazoo Basin Boundary



Yazoo Basin, Main Stem, MS



**US Army Corps
of Engineers**
Vicksburg District

Project Fact Sheet

Yazoo Basin, Main Stem, MS

Flood Control Acts of 1941, 1944, and 1965

Mississippi River and Tributaries, Maintenance (FRM)

Location: The project is located in the Yazoo Basin, MS.

Description: The project includes the operation and maintenance of 136 miles of levees, 287 miles of channels, and 74 drainage structures.

Issues: Critical work is needed to ensure the integrity of the project to protect people and property from flooding. This critical work consists of rebuilding the riverside face of 3.1 miles of the West Bank, Coldwater River Levee to USACE standards with impervious material and remove unwanted vegetation from within 15 feet of both levee toes. ARRA funds were used to purchase stone and perform bank stabilization at Item 3A2 and 290-L on the Yazoo River to protect adjacent levees.

Importance: The project provides flood protection to the Yazoo Basin along the Tallahatchie, Coldwater River below the spillway of Arkabutla Dam and the Yazoo River. Flood damage reduction measures include authorized levees, channels and appurtenant drainage structures. The incorporation of a spoil bank into 3.1 miles of the West Bank, Coldwater levee system resulted in this reach being decertified in 2010. The 2011 flood emphasized the need to complete this bank stabilization to preserve the integrity of the levees.

Risk: Leaving the project in disrepair may lead to flooding issues and reduced levels of flood protection in the project area.

Consequence: Failure to operate and maintain the project would jeopardize the project integrity and benefits. Plans and specifications are complete for the rehab of this reach of levee to provide flood protection and enable this reach to be recertified.



West Levee Sta. 681+00 – In this reach, existing spoil was shaped for the roadway and levee and the riverside slopes are heavily wooded. The Coldwater levee system contains numerous reaches similar to this.

Activities Status for FY 14: Funds are being used to continue minimal operation and maintenance. Supplemental funds are being used to repair bank stability issues on the levee system.

Acquisition Strategy: No contract will be awarded in FY 14.

Amount That Could Be Used in FY 15: Budgeted funds of \$1,344,000 will be used for routine operation and maintenance, data gathering and periodic inspections; critical work needed to ensure the integrity of the project to protect people and property from flooding. Additional funds in the amount of \$4,041,000 could be used to fund installation of pipeliners to restore structures & provide gravel surfacing for levee (\$200), construct levee setback and replace drainage structure at Silent Shade (\$3,000), levee slides (\$260), mitigation O&M (\$450), and critical bridge inspection (\$131).

Project Sponsor/Customer: Yazoo-Mississippi Delta Levee Board

Congressional Interest: Senate: Wicker and Cochran (MS); House: Thompson (MS-2).

Phase	FY 14 Allocation	FY 14 Supplemental	FY 15 Budget	FY 15 Total Capability
Maintenance	\$1,273,000	\$0	\$1,344,000	\$5,385,000



Greenville Harbor, Mississippi



**US Army Corps
of Engineers**
Vicksburg District

Flood Control Act (FCA) of 1928, as amended by FCAs 1946, 1954, and WRDA 1986

Project Fact Sheet Greenville Harbor, MS

Mississippi River and Tributaries, Maintenance (NAV)

Location: The Greenville Harbor, located at Greenville, MS, provides access to the Mississippi River by way of a 250-foot-wide by 9-foot-deep channel. The harbor is located in an old bendway of the Mississippi River on Lake Ferguson, just southwest of the city of Greenville.

Description: The harbor and turning basin are 500 feet wide and 10,000 feet long, with a maintained depth of 9 feet at the lowest river stages. The harbor is connected to the Mississippi River by a channel 250 feet wide with a maintained depth of 9 feet at the lowest river stages. The project's purpose is to provide local businesses, industries and vessels navigating the Mississippi River access to the harbor facilities at Greenville.

Issues: Without maintenance dredging funds, this harbor will lose project dimensions during the busiest time of the year when crops are harvested and shipped via various ports and harbors along the Mississippi River.

Importance: This harbor provides a means for farmers, as well as other industries, in a large area of the Mississippi Delta a less costly means to ship commodities.

Risk: The loss of a dependable, reliable, and safe harbor will have significant adverse impacts on the region due to the increased shipping costs by rail and trucks.

Consequence: The many small communities and farmers served by this harbor will be forced to seek other, more costly means to move their products. Also, approximately 540 jobs could be lost, with an annual payroll of \$12.6 million.



Greenville Harbor

Activities and Current Status for FY 14: Funds are being used for maintenance dredging of the harbor.

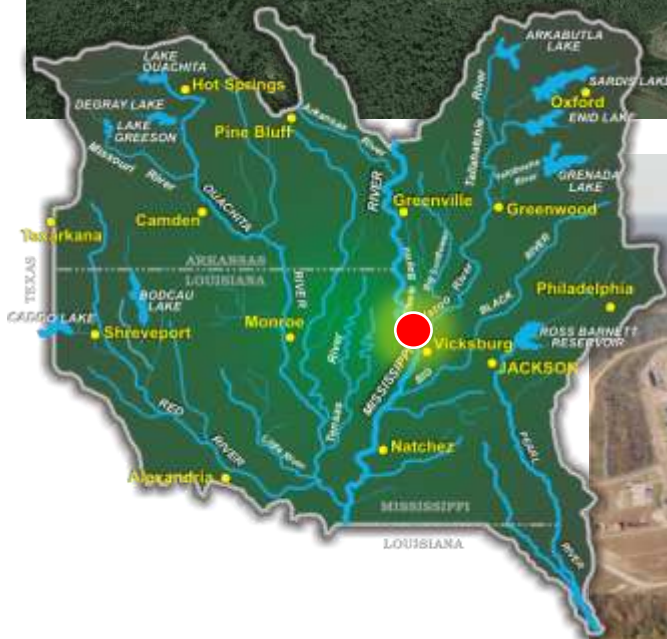
Acquisition Strategy: A contract will be awarded for harbor and port dredging.

Amount That Could Be Used in FY 15: Budgeted funds of \$24,000 will be used for surveys. Additional funds in the amount of \$800,000 could be used for maintenance dredging.

Project Sponsor/Customer: Greenville Port Commission

Congressional Interest: Senate: Wicker and Cochran (MS); House: Thompson (MS-2).

Phase	FY 14 Allocation	FY 15 Budget	FY 15 Total Capability
Maintenance	\$524,000	\$24,000	\$824,000



Vicksburg Harbor, Mississippi



**US Army Corps
of Engineers**
Vicksburg District

Flood Control Act (FCA) of 1928, as amended by FCAs 1946, 1954, and WRDA 1986

Project Fact Sheet Vicksburg Harbor, MS

Mississippi River and Tributaries, Maintenance (NAV)

Location: The Vicksburg Harbor is located in west-central Mississippi at Vicksburg, MS, with access to the Mississippi River by way of the Yazoo River Diversion Canal.

Description: The harbor channel is 500 feet wide and 12,000 feet long with a 500-foot-wide, 15,000-foot-long channel on the Yazoo River Diversion Canal from the Mississippi River to the harbor entrance. The Upper Harbor channel is 150 feet wide. A minimum depth of 9 feet at the lowest Mississippi River stage is maintained. The project's purpose is to provide local businesses, industries and vessels navigating the Mississippi River access to the harbor facilities at Vicksburg. Riverside development within the project area has occurred along the east banks of the Mississippi River and the Yazoo Diversion Canal and extends upstream from the vicinity of Interstate 20 Highway Bridge for a distance of approximately 8 miles.

Issues: Local commerce and vessels navigating the Mississippi River use the harbor facilities at Vicksburg. The Vicksburg District's Mat Sinking Unit and Dredge *Jadwin* are moored at the Vicksburg Harbor during the off-season as well.

Without maintenance dredging funds, this harbor will lose project dimensions during the busiest time of the year when crops are harvested and shipped via various ports and harbors along the Mississippi River.

Importance: This harbor serves as a shipping point for a wide range of industries and is a major contributor to the local economy.

Risk: The loss of a dependable, reliable, and safe harbor will have significant adverse impacts on the region due to the increased shipping costs by rail and trucks.

Consequence: The many small communities and farmers served by this harbor will be forced to seek other, more costly means to move their products. Approximately 2,000 jobs could be affected with an annual payroll of \$80 million. The economic impact to the area is approximately \$564.8 million.



Vicksburg Harbor

Activities for FY 14: Funds are being used for maintenance dredging of the harbor.

Acquisition Strategy: A contract will be awarded for all harbor and port dredging.

Amount That Could Be Used in FY 15: Budgeted funds of \$42,000 will be used for surveys. Additional funds in the amount of \$900,000 could be used for maintenance dredging.

Project Sponsor/Customer: Vicksburg/Warren County Port Commission

Congressional Interest: Senate: Wicker and Cochran (MS); House: Thompson (MS-2).

Phase	FY 14 Allocation	FY 15 Budget	FY 15 Total Capability
Maintenance	\$542,000	\$42,000	\$942,000



**Yazoo Basin,
Tributaries, MS**



**US Army Corps
of Engineers**
Vicksburg District

Project Fact Sheet

Yazoo Basin, Tributaries, MS

Flood Control Acts of 1941, 1944, and 1965

Mississippi River and Tributaries, Maintenance (FRM)

Location: The project is located in the Yazoo Basin, MS.

Description: The project includes the operation and maintenance of 136 miles of levees, 287 miles of channels, and 74 drainage structures.

Issues: Critical work is needed to ensure the integrity of the project to protect people and property from flooding. This work consists of providing adequate levels of funding to the O&M contractor for the removal of vegetation and encroachments and to operate the drainage structures on an as-needed basis.

Importance: The project provides flood protection to the Yazoo Basin along the Little Tallahatchie, Yalobusha, and Yocona Rivers from the spillways of Sardis, Enid, and Grenada Dams to the main stem of the Yazoo River and various smaller tributary streams that empty directly into the Yazoo River. Flood damage reduction measures include authorized levees, channels and appurtenant drainage.

Risk: Leaving the project in disrepair may lead to flooding issues and reduced levels of flood protection in the project area.

Consequence: Failure to operate and maintain the project would jeopardize the project integrity and benefits.



Ascalmore-Tippo Sta. 335+00 – North Levee

Activities for FY 14: Funds are being used to continue operation and maintenance at a reduced level of service. Supplemental funds will be used to complete levee system repairs.

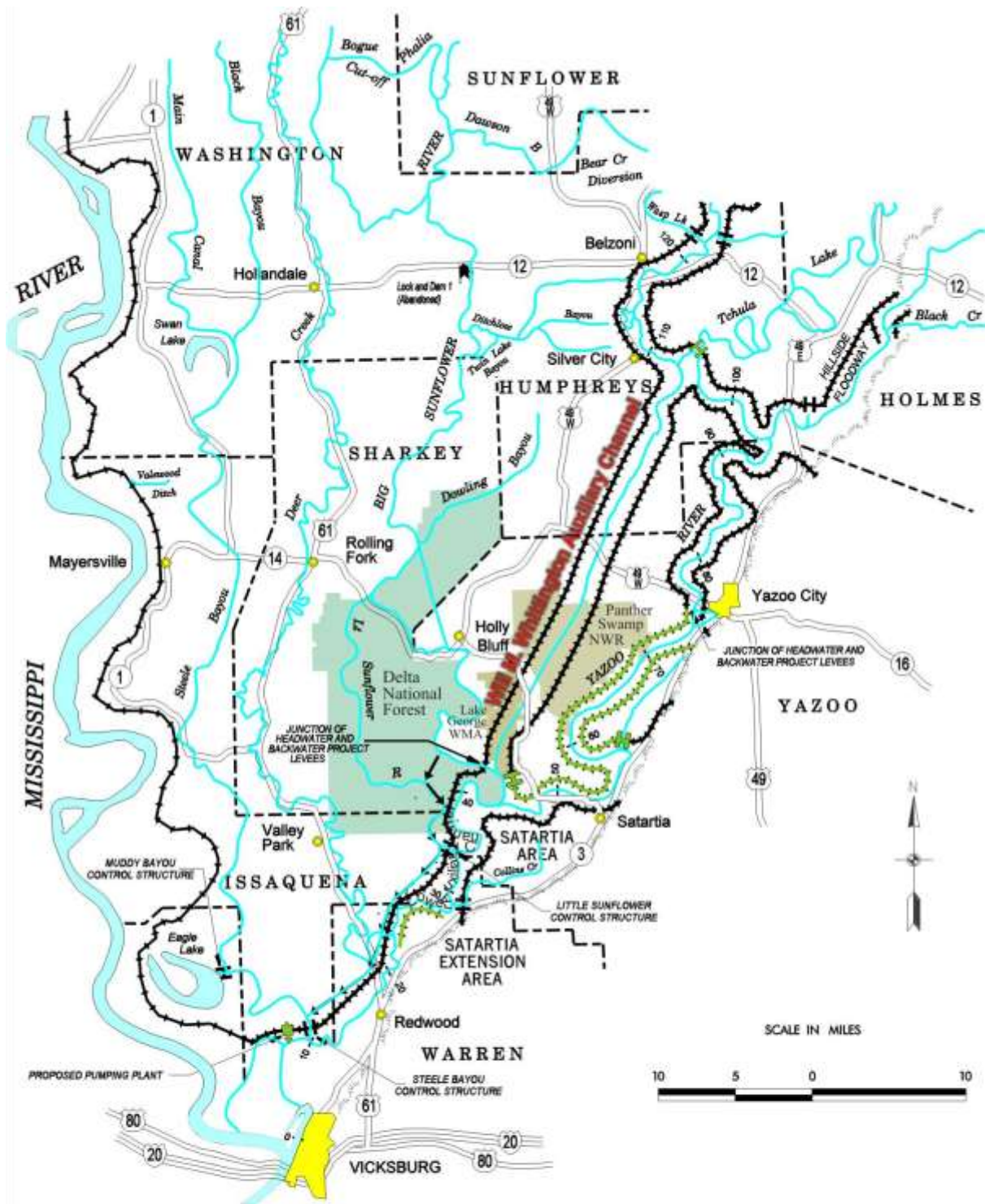
Acquisition Strategy: No contracts are scheduled to be awarded in FY 14.

Amount That Could Be Used in FY 15: Budgeted funds of \$967,000 will be used for routine operation and maintenance, data gathering and periodic inspections; critical work needed to ensure the integrity of the project to protect people & property from flooding. Additional funds of \$80,000 could be used for pipeliners (\$200,000); gravel (\$130,000); pump repairs for McKinney Bayou pump station (\$250,000).

Project Sponsor/Customer: Yazoo-Mississippi Delta Levee Board

Congressional Interest: Senate: Wicker and Cochran (MS); House: Thompson (MS-2).

Phase	FY 14 Allocation	FY 14 Supplemental	FY 15 Budget	FY 15 Total Capability
Maintenance	\$944,000	\$0	\$967,000	\$1,547,000



**Yazoo Basin,
Will M. Whittington Auxiliary Channel, MS**



US Army Corps
of Engineers
Vicksburg District

Yazoo Basin, Will M. Whittington Auxiliary Channel, MS

Flood Control Acts of 1928, 1936, 1937, 1938, 1941, 1944, 1946, 1962 and 1965

Mississippi River and Tributaries, Maintenance (FRM)

Location: The project is located in west Mississippi in portions of Yazoo and Humphreys Counties and is a part of the Yazoo Basin Headwater Area.

Description: The project includes a leveed floodway and landside drainage ditches from the vicinity of Silver City on the Yazoo River to near the mouth of Big Sunflower River.

Issues: Critical work is needed to ensure the integrity of the project to protect people and property from flooding. This work consists of providing adequate levels of funding to the O&M contractor for the removal of vegetation and encroachments and place granular surface material on the levees as needed to provide all-weather access.

Importance: This flood control feature in the Yazoo Basin headwater area is a leveed floodway that splits the flows of the Yazoo River and reduces flood stages on the Yazoo River. The levee provides major flood protection to areas between the Will Whittington Levee and the Mississippi River east bank levee.

Risk: Leaving the project in disrepair may lead to levee safety issues, levee certification issues and reduced levels of flood protection and higher risks.

Consequence: Failure to operate and maintain the project would jeopardize the project integrity and benefits.



Will M. Whittington Levee

Activities for FY 14: Funds are being used to continue operation and maintenance of project features.

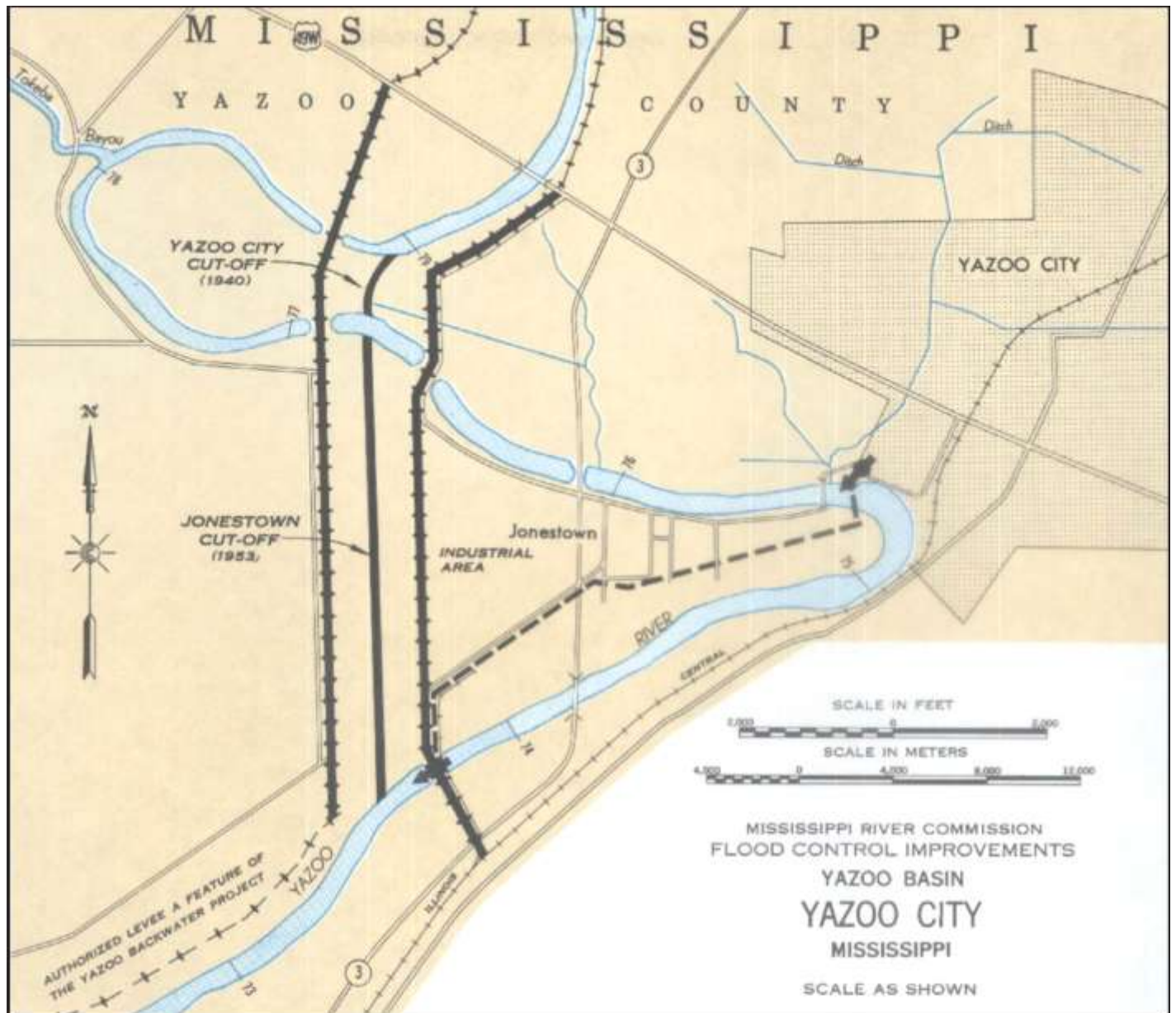
Acquisition Strategy: No contracts are scheduled to be awarded in FY 14.

Amount That Could Be Used in FY 15: Budgeted funds of \$384,000 will be used for routine operation and maintenance, data gathering and periodic inspections; critical work needed to ensure the integrity of the project to protect people & property from flooding. Additional funds in the amount of \$600,000 could be used for gravel surfacing for the levee (\$500,000), critical levee slide repairs (\$100,000).

Project Sponsor/Customer: Yazoo-Mississippi Delta Levee Board

Congressional Interest: Senate: Wicker and Cochran (MS); House: Thompson (MS-2).

Phase	FY 14 Allocation	FY 14 Supplemental Allocation	FY 15 Budget	FY 15 Total Capability
Maintenance	\$375,000	\$0	\$384,000	\$984,000



**Yazoo Basin,
Yazoo City, MS**



**US Army Corps
of Engineers**
Vicksburg District

Project Fact Sheet

Yazoo Basin, Yazoo City, MS

Flood Control Acts of 1928, 1936, 1937, 1938, 1941, 1944, and 1946

Mississippi River and Tributaries, Maintenance (FRM)

Location: The project is located in the Yazoo Basin.

Description: The project includes the operation and maintenance of Yazoo City Protection Works and includes levees, channels, drainage structures, pumping plants and weirs.

Issues: Critical work is needed to ensure the integrity of the project to protect people and property from flooding. This work consists of providing adequate levels of funding for the O&M contractor to operate the drainage structures and pump station on an as-needed basis.

Importance: The city of Yazoo City was established on a bendway of the Yazoo River. Yazoo City is a major center of transportation and commerce where the uplands of Mississippi meets that portion of the state of Mississippi known as the Mississippi Delta. These flood damage reduction measures protect Yazoo City from flooding from the Yazoo River.

Risk: Leaving the project in disrepair may lead to flooding issues and reduced levels of flood protection in the project area.

Consequence: Failure to operate and maintain the project would jeopardize the project integrity and benefits.



Yazoo City Protection Works - East Levee - Station 44+00

Activities for FY 14: Funds are being used to continue operation and maintenance of project features, rehabilitate pipe structures, and evaluate levee seepage concerns.

Acquisition Strategy: No contracts are scheduled to be awarded in FY 14.

Amount That Could Be Used in FY 15: Budgeted funds of \$731,000 will be used for routine operation and maintenance, data gathering and periodic inspections; critical work needed to ensure the integrity of the project to protect people and property from flooding. Additional funds in the amount of \$100,000 could be used for Rehab of 24 relief wells at Yazoo City Pumping Plant.

Project Sponsor/Customer: Yazoo-Mississippi Delta Levee Board

Congressional Interest: Senate: Wicker and Cochran (MS); House: Thompson (MS-2).

Phase	FY 14 Allocation	FY 15 Budget	FY 15 Total Capability
Maintenance	\$714,000	\$731,000	\$831,000



**Jesse Brent Lower Mississippi River Museum
And Riverfront Interpretive Site**



US Army Corps
of Engineers
Vicksburg District

Project Fact Sheet MRL, Jesse Brent Lower Mississippi River Museum and Riverfront Interpretive Site

WRDA 1992, WRDA 2000, and E&W Development Appropriations Act 2006

Mississippi River and Tributaries, Maintenance (FRM)

Location: The Lower Mississippi River Museum (LMRM) is located at 901 Washington St., Vicksburg, Mississippi 39180.

Description: The museum which opened in August 2012 provides visitors with a better understanding of the risks and benefits of living along the Lower Mississippi River and the collaborative effort for risk management. The museum features interior museum displays, an outdoor Mississippi River model, and displays onboard the MV MISSISSIPPI IV.

Issues: Funding for Operation and Maintenance (O&M) of the facility.

Importance: The LMRM is one of the only Federal facilities that assist the Corps of Engineers in interpreting flood risk management to the general public. Visitors learn the importance of the MR&T system, comparing historic floods to future forecasts, river dynamics, and Corps history through a variety of interactive and engaging displays. The museum has received excellent public support and it has already made a positive impact to the downtown area.

Risk: Future funding for LMRM operation and maintenance is unsecured and subject to District prioritization. Funding is provided under the MR&T Mississippi River Levees Maintenance feature.

Consequence: If the LMRM is not operated and maintained, the museum will close. The city of Vicksburg and the public would lose an education center that safely exposes individuals to the risk of flooding which is a valuable tool to educate the public regarding flood risk management. The MV MISSISSIPPI IV, property, and items belonging to the Federal government would fall into disrepair.



Activities for FY 14: Normal operation and maintenance of the facility through an existing O&M contract.

Acquisition Strategy: None.

Amount That Could Be Used in FY 15: Funds in the amount of \$500,000 could be used to continue operation and maintenance of the museum.

Project Sponsor/Customer: None.

Congressional Interest: Senate: Cochran and Wicker (MS); House: Thompson (MS-2).

Phase	FY 14 Allocation	FY 15 Budget	FY 15 Total Capability
Maintenance	\$0	\$0	\$500,000



Mississippi River and Ouachita River Levee Districts In Louisiana



Red River Levee Districts in Arkansas



Mississippi River Levee Districts In Mississippi



Red River Levee District in Louisiana



**US Army Corps
of Engineers**
Vicksburg District

Project Fact Sheet

Negative Levee Evaluations

Water Resources Development Act 2007

Mississippi River and Tributaries, Maintenance (FRM)

Location: Throughout the Vicksburg District.

Description: The U.S. Army Corps of Engineers flood damage reduction mission began with the 1928 Flood Control Act, which authorized the Corps to have a significant role in flood activities nationwide, to include the protection of life and property behind Federal levee systems. Prior to the devastation in 2005 from Hurricanes Katrina and Rita, levee safety had become an issue with the Federal Emergency Management Agency (FEMA), but these events heightened the awareness. The findings of subsequent investigations into the flood damage reduction system's performance in New Orleans clearly point to the need for a comprehensive and risk-informed approach to national levee safety, including periodic assessments. This led to the development of a national levee safety program authorized through legislation within WRDA 2007.

Issues: Inability to achieve positive evaluation criteria for numerous MR&T levees, which have received negative evaluation reports: Ouachita River, East Bank Levee, LA; Larto Lake to Jonesville Area Levee, LA; Red River Backwater Levee, LA; Yazoo Backwater Levee, MS; Yazoo LB Central Levee, MS; Big Sand, Yalobusha, Teoc Creek Levee, MS; Pelucia Creek South Levee, MS; Teoc Creek North Levee, MS; and Greenwood, MS, East and West Bank levee systems. We are still evaluating other MR&T levees which also could be decertified. Estimated comprehensive cost to identify issues and remediate the de-accredited systems is \$10.55 million.

Importance: The decertification of the levees indicates the levees are not capable of containing the 1% flood event with the required freeboard or structure within the levee are inadequate. Even though the EC is a flood insurance standard for FEMA, it also indicates the levees may not be capable of withstanding a flood of greater magnitude. The levees play an important role in flood damage reduction to avoid loss of life and property damage the safety.

Risk: Not addressing the issues that caused the levees to be decertified may lead to levee safety issues and reduced levels of flood protection and higher risks to individual and property.

Consequence: Failure to address the issues with the levees would jeopardize the projects' integrity and cause potential levee failure and flooding. Additionally, until the issues with the decertified levee are addressed, FEMA will map the areas behind the levees in a flood zone requiring flood insurance.



Activities and Current Status for FY 14: None.

Acquisition Strategy: No contracts are scheduled to be awarded in FY 14.

Amount That Could Be Used in FY 15: Funds could be used determine specific issues with levees that received negative evaluations and secondly to address and remediate the problems.

Project Sponsor/Customer: Fifth Louisiana Levee District, Tensas Basin Levee District, Mississippi Board of Levee Commissioners, and Yazoo-Mississippi Delta Levee Board.

Congressional Interest: Senate: Landrieu and Vitter (LA); Cochran and Wicker (MS); House: Scalise (LA-1), Fleming (LA-4), McAllister (LA-5), Nunnelee (MS-1), Thompson (MS-2).

Phase	FY 14 Allocation	FY 15 Budget	FY 15 Total Capability
Maintenance	\$0	\$0	\$2,200,000



Water Supply

Navigation

Hydropower

Flood Risk Management

Hurricane & Storm Damage Risk Reduction

VICKSBURG DISTRICT MISSIONS

Emergency Operations

Recreation

Support to Contingency Operations

Regulatory

Environmental Stewardship

